



International Federation of Library Associations and Institutions
Fédération Internationale des Associations de Bibliothécaires et des Bibliothèques
Internationaler Verband der bibliothekarischen Vereine und Institutionen
Международная Федерация Библиотечных Ассоциаций и Учреждений
Federación Internacional de Asociaciones de Bibliotecarios y Bibliotecas

About IFLA

www.ifla.org

IFLA (The International Federation of Library Associations and Institutions) is the leading international body representing the interests of library and information services and their users. It is the global voice of the library and information profession.

IFLA provides information specialists throughout the world with a forum for exchanging ideas and promoting international cooperation, research, and development in all fields of library activity and information service. IFLA is one of the means through which libraries, information centres, and information professionals worldwide can formulate their goals, exert their influence as a group, protect their interests, and find solutions to global problems.

IFLA's aims, objectives, and professional programme can only be fulfilled with the co-operation and active involvement of its members and affiliates. Currently, over 1,700 associations, institutions and individuals, from widely divergent cultural backgrounds, are working together to further the goals of the Federation and to promote librarianship on a global level. Through its formal membership, IFLA directly or indirectly represents some 500,000 library and information professionals worldwide.

IFLA pursues its aims through a variety of channels, including the publication of a major journal, as well as guidelines, reports and monographs on a wide range of topics. IFLA organizes workshops and seminars around the world to enhance professional practice and increase awareness of the growing importance of libraries in the digital age. All this is done in collaboration with a number of other non-governmental organizations, funding bodies and international agencies such as UNESCO and WIPO. IFLANET, the Federation's website, is a prime source of information about IFLA, its policies and activities: www.ifla.org

Library and information professionals gather annually at the IFLA World Library and Information Congress, held in August each year in cities around the world.

IFLA was founded in Edinburgh, Scotland, in 1927 at an international conference of national library directors. IFLA was registered in the Netherlands in 1971. The Koninklijke Bibliotheek (Royal Library), the national library of the Netherlands, in The Hague, generously provides the facilities for our headquarters. Regional offices are located in Rio de Janeiro, Brazil; Dakar, Senegal; and Singapore.

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**Management, Marketing and
Promotion of Library Services
Based on Statistics, Analyses
and Evaluation**

Edited by
Trine Kolderup Flaten

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Preface

In connection with the World Library and Information Congress in Oslo, Norway, from 14th – 18th of August 2005, IFLA's Management & Marketing Section arranged a Satellite Meeting in Bergen city, Norway, from Tuesday 9th to Thursday 11th of August. A call for papers was published in September 2004:

CALL FOR PAPERS

IFLA Management & Marketing Section

Co-sponsors:

Public Libraries Section and Library Theory and Research Section

Theme:

“Management, marketing, evaluation and promotion of library services, based on statistics, analyses and evaluation in your own library”.

Language:

The main conference language will be English. If the necessary financial support is gained, we hope to be able to offer translation facilities for French, and Spanish presentations.

THEME AND OBJECTIVES:

Theme:

The conference aims to:

- bring together practitioners from various types of libraries, researchers and educators in library and information science to discuss research methods and strategies, data collection, evaluation and performance measurement, and best-practice strategies;
- improve methods for evaluation and analysis of library work in different types of libraries;
- encourage continuous improvement of the libraries' services, by using analysis, performance measurement, best practice, etc. in managing and promoting library services;
- share international experience on these topics.

Subjects for papers may include case studies, research, projects, best-practice development, and proposed models related to statistics and evaluation practices, including discussion of research methods and data collection and analysis.

Proposals for presentations, in the form of one page summaries should be sent by December 15th, 2004 to: Trine Kolderup Flaten, **trine@bergen.folkebibl.no** on behalf of the organizers.

The proposals should include the name, contact information and institutional affiliation of the author; and a summary of the content to be presented.

All proposals will be evaluated by a committee with representatives appointed by the three sections:

Management & Marketing Section: Daisy McAdam, Angels Massísimo, Christie Koontz

Coordinator: Trine Kolderup Flaten,

Library Theory and Research Section: Ragnar Audunson, Beverly Lynch

Public Library Section: Torny Kjekstad, Gunilla Konradsson

The evaluating committee will inform the applicants of the results by the end of February 2005.

Final versions of the presentations must be submitted to the above mentioned address by the end of March 2005.

The evaluating committee received more than 50 papers by 63 authors for evaluation. 40 papers were accepted, and at the end 31 presentations were given at the conference in Bergen, by 38 authors from 4 continents and 14 different countries.

The Satellite meeting gathered 73 participants from 5 continents and 17 different countries: practitioners, researchers, educators from all parts of library and information sectors shared international experience on the conference topics.

The need for simultaneous translation could not be solved due to the high costs for such services. Instead adequate handouts, some of them in two languages, of all the presentations were made and distributed to the participants.

Local co-sponsors for the arrangements in Bergen were:
University Library of Bergen, Bergen University College and Hordaland County
Library.

After the pre-conference a special tour was arranged in order to bring participants
and accompanying persons from Bergen via fiords and mountains to the IFLA
congress in Oslo.

It must be said that a successful “Call for papers” creates a tremendous amount of
work. But the Call for papers has proved to be an excellent way to gather very
interesting speakers for the pre-conference.

Printed version of the proceedings

The presentations in Bergen were based on the articles/reports/studies that
appear in more elaborate form in this book.

Two of the presentations were not represented here, one of them being Anne
Sen’s, as her material had been edited elsewhere.

Trine Kolderup Flaten, *editor*

Program

World Library and Information Congress, 71st IFLA General Conference and Council, from 14th – 18th of August 2005 in Oslo, Norway

IFLA Management & Marketing Section

Satellite meeting 2005

Theme: “Management, marketing, evaluation and promotion of library services, based on statistics, analyses and evaluation in your own library”.

Co-sponsors: Public Libraries Section and Library Theory and Research Section

Venue: Bergen city, Norway, from Tuesday 9th to Thursday 11th of August 2005

Programme

TUESDAY 9/8 TERMINUS HALL, AT GRAND HOTEL TERMINUS:

14.00 OPENING: Monica Mæland, Chief Commissioner, City of Bergen

14.10 – 15.20 PLENARY SESSION

Moderator: Trine Kolderup Flaten/ Daisy McAdam

**Taking A Measured Approach to Library Management:
Performance Evidence Applications and Culture**

J. Eric Davies, UK, England

Statistics and Strategy

Ulla Wimmer, Germany

Break, coffee, fruit

15.35 – 17.15 PLENARY SESSION

Moderator: Ragnar Audunson

Comparing libraries : from official statistics to effective strategies

Tord Høivik, Norway

Defining Market Orientation for Libraries

Barbara Anne Sen, UK, England

Cyberspace and market place: library messages beyond the border

Myoung C.Wilson and Farideh Tehrani, USA

EVENING PROGRAMME:

19.00 Departure by bus from outside Grand Hotel Terminus, for the Edvard Grieg Museum, Troidhaugen

- 19.30 Guided tour with a small Concert.
Reception by the Mayor of Bergen. Buffet
- 21.45 Departure by bus from Edvard Grieg Museum, Trolldhaugen

WEDNESDAY 10/8 BERGEN UNIVERSITY COLLEGE

09.00 – 10.15 PLENARY SESSION

Moderator: Rejean Savard

Quality standards

Louise Guillemette-Labory and Pierre Meunier, Montreal, Canada

Using Geographie and Library Use Data for Improved Strategic Planning and Decision-making

Christie Koontz, USA

10.30 – 12.45 Parallel sessions/workshops

SESSION 1

THEME: NATIONAL/LOCAL STATISTICS AND ANALYSIS – TOOLS/METHODES

Moderator: Christie Koontz

Library Statistics without Fear

Ellen Maleszewski and Michael B. Huang, USA

From evaluation of outputs to evaluation of impacts : the use of GIS

Thierry Giappiconi, France

Statistics to plan: statistical development in a regional system of public libraries (Valencian Community – Spain)

Ignazio Latorre Zacarés and Milagros Ortells Montón, Spain

Public libraries in Estonia 1994-2004

Margit Jõgi, Estonia

SESSION 2

THEME: STAFF/ORGANIZATION DEVELOPMENT

Moderator: Daisy McAdam

Audit for libraries... which one ?

Marielle de Miribel, France

Coordination of higher educational institutions and professional library associations – the key to training quality rise of librarians of XXI century

Natalia Gendina, Russia

THEME: POLICY - STRATEGIC DECISIONS

La bibliothèque municipale face aux fluctuations financières : l'impensé managérial dans les bibliothèques municipales des villes moyennes

Liman Latifa, France

Evaluation of libraries : experiences from applying a method for non-market valuation developed in economics

Svanhild Aabø, Norway

12.45 Lunch on the premises

13.45 – 17.15 Parallel sessions/workshop

SESSION 3

THEME: NEW ORIENTATION AND MARKETING BASED ON ANALYSES OF PERFORMANCE, USERS' BEHAVIOUR/SATISFACTION

Moderator: Ragnar Audunson

Customers Value Research

Sue McKnight, UK, England

Management and marketing in the Library and Documentation Centre of Artium Basque Centre-Museum of Contemporary Art

Elena Roseras Carcedo, Spain (Basque)

Marketing to Diverse Populations

Kathleen Imhoff, USA

Getting help and doing research: what do patrons want?

An exploratory study comparing desk users with virtual reference users

Diane Granfield and Mark Robertson, Canada (Toronto)

Marketing Library Services

Yoo-Seong Song, USA

The library as a part a life style: report on a large scale survey to identify user segments on cultural and reading behavior in Flanders

Bart Verduyssen, Belgium

SESSION 4

THEME: DEVELOPE SUITABLE INDICATORS FOR LIBRARY AND INFORMATION WORK. SURVEYS OR OBSERVATIONS. STANDARDS

Moderator: Angels Massisimo

Evaluating library services – best practice initiatives in Australian University Libraries

Helen King, Australia

The public library's attractiveness : a quantitative study

Claude Poissenot, France

From secondary school to the world of work: the experience of evaluating Information Literacy skills development at Glasgow Caledonian University

John Crawford, UK, Scotland

Statistical indicators on reading and Literacy for “Information Society” versus the “technisist” Indices of ITU

Ksibi Ahmed, Tunisia

Parameters and indicators for providers of electronic publications evaluation

Maria Luisa Alvite Diez and Blanca Rodriguez Bravo, Spain

Evening programme:

19.00 – 21.00 Reception at the University Library, Bergen

THURSDAY 11/8 TERMINUS HALL, AT GRAND HOTEL TERMINUS:

09.00 – 10.15 Plenary session

Moderator: Rejean Savard

Promoting Library Services, Designing Marketing Strategies, Evaluating our Past and our Present, Feeling more Optimistic about our Libraries Future

Antonia Arahova, Greece

A new model for public library and information services evaluation: SIADAP+B

Leonor Gaspar Pinto and Paula Ochôa, Portugal

Break

10.30 – 11.45 Plenary session

Moderator: John Lake

Developing a culture of evidence based practice within the library and information profession: the impact of library science education. A teaching and learning model from the Queensland University of Technology

Gillian Hallam, Australia

Measuring and Mapping the Invisible: Alternative procedures to understand users' approaches to information in a university library

Gildas Illien, France

Break

12.10 – 12.50 Plenary Session

Moderator: Daisy McAdam

Libraries Building Communities: the vital contribution of Victoria's public libraries – A report on a major research project of the Library Board of Victoria and the Victorian public library network

Debra Rosenfeldt, Australia

12.50 – 13.00 - Closing, thanks

Taking A Measured Approach to Library Management: Performance Evidence Applications and Culture

J. Eric Davies

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Co-author: Claire Creaser, Deputy Director
and Senior Statistician, LISU*

Introduction

This paper outlines the general context of managing through performance evidence and draws on experience acquired by LISU, firstly to discuss how a culture of managing with performance evidence may be developed in an organisation and, secondly to describe, with examples, the scope for applying performance evidence to service development.

Context

Information and library services facilitate access to information, they provide space and opportunities for the community to engage individually or collectively with information and they offer stimulus through a range of formal activities. Information and library services serve as many faceted agencies because their user community draws upon them for learning, leisure, work and living. These represent a formidable array of functions and demands. Importantly, information and library services involve a considerable investment by the sponsoring organisation or community in capital and revenue and it is vital that these resources are husbanded carefully and applied to greatest advantage. The varied resources available have to be used as economically, efficiently and effectively as possible. Rarely, if ever, do such services operate in a climate of plenty.

The Challenge of Management

Managers of library and information services are confronted by an ever increasing range of demands to provide appropriate services of acceptable quality at optimal cost to meet the strategic objectives set by the community, whether it be a public authority, an academic institution or a corporate body. The modern manager's role is complex and intensive; at the same time delivering what is needed today, reflecting on yesterday's achievements (and setbacks) and anticipating tomorrow's needs. The range of managerial activity is formidable and includes: assembling, organising and deploying resources, prioritising demands, delegating and sharing activity, motivating and mentoring colleagues, assessing current and future needs, planning and initiating new development, undertaking advocacy for funding, and communicating with a variety of people within and outside the organisation.

The Importance of Performance Evidence

Central to good service delivery is establishing a clear vision of what is to be achieved, knowing, with some precision, what is happening and comparing it with what was planned. Performance evidence, built on a solid foundation of service goals, has, therefore, an important contribution to make to the management of modern information and library services. In addition, properly presented performance evidence can provide compelling support for advocacy. Another factor that compels the use of performance evidence in some cases is the requirement to demonstrate the level of service activity to external agencies such as government departments.

The mere availability of appropriate and reliable supporting evidence is, on its own, insufficient, however. How well people manage is influenced by their capacity to utilise such evidence intelligently. This implies a range of capabilities, the most important of which is the ability to determine which facets of service delivery require, or may offer the most benefit from evaluation. Others include: identifying relevant evidence, devising reliable and economic methods for gathering it, analysing and interpreting information, including discerning trends, developing appropriate strategies and actions, and presenting assimilated data to others.

Performance Evidence – What kind?

The portfolio of performance evidence, quantitative and qualitative, that can be called upon to support service evaluation and improvement is considerable. However, collecting and applying performance evidence is not without cost, so the focus should be on using only what is really necessary; the fundamental rule being - measure what you need; need what you measure.

Familiar types of evidence now widely employed include; inputs, outputs, outcomes and impact as well as service domain descriptors and user [and equally importantly, perhaps, potential user] responses. Although they are often discussed

as separate items, in practice they are highly interrelated and need to be viewed, and, more importantly, used as a coherent set of facts and figures that underpin management decision making.

LISU's work on many projects has demonstrated the value of qualitative as well as quantitative evidence. Numbers [especially reliable numbers] remain important, however, qualitative evidence in the form of case studies, anecdotal accounts, user feedback and structured notes on user perceptions offers a very useful basis for evaluating services and can be persuasive in terms of advocacy. The softer social indicators that are growing in importance and relevance also contribute to an understanding of the way services contribute.

Inputs describe the resources that are applied to providing a service and will contain financial and other data. Inputs include; how much money is spent on the service as a whole and on different parts of it, the numbers and grades of staff employed, the accommodation that is available, opening hours of service points, a description of the collections made available (including electronic sources that may be virtual) and the equipment, including workstations, deployed. Though many are quantitative measures, some qualitative dimensions are also relevant, for example collections can be described in terms of their quality by applying very sophisticated evaluation criteria such as CONSPECTUS¹ in academic research libraries.

Outputs describe what the user gets directly out of the service. They cover quantities, qualities and values of what the service delivers. Quantitative outputs include; visits made to a service, items loaned, requested and reserved items fulfilled, documents or photocopies supplied, items consulted within a library, enquiries received and answered, search sessions performed and end user training events arranged. Qualitative indicators of output may relate, for example, to the relevance of documents supplied, or the reliability and accuracy of information provided and in many cases they are more difficult to establish. Some quantitative output indicators can be refined to yield information on the quality of the service. For example, the number of enquiries answered inside a specified target time, or the percentage of reservations fulfilled within a specified waiting time can be calculated.

Outcomes describe the contribution that a service makes to the activities of the user whether they are related to work, learning or leisure. They represent the interaction between user and service. Service penetration, that is, the level of active members of a service offers an indication of outcome as does the amount of repeat use of a service. Another quantitative outcome is the needs/fill rate which measures how often the user gets what he, or she wanted. More detailed exploration can reveal whether a user found information supplied useful and usable, and add to the qualitative assessment of outcome. Discovering user satisfaction with particular aspects of the service can also indicate outcomes.

Impacts describe the broader influence that the service has on a community or organisation. Impact may be interpreted as; what difference, in the long run, has the service made? Put more directly the question can be redefined in the following ways - in a community public service, how does it add to social and cultural life as well as economic prosperity; in an educational environment, how does it support learning and research; in a commercial organisation, how does it contribute to profitability and growth? Recently published public library impact standards developed in the UK relate to key areas of social development in the community. In this construct, they have a dimension that makes them inseparable from the overarching political agenda and, as such, are a reminder that the priorities and preoccupations may alter with the political climate.^{2 3}

Service domain data relate to the context in which a service is operating. Such information describes the size and characteristics of the population to be served and therefore comprises actual, as well as potential, users. In addition to geographic data on a population and its distribution, more detailed information on special groups of users, and potential users, can be gathered. Such knowledge is important for designing services that properly match user needs. Community profiling, undertaken in partnership with the constituent members of a community, takes analysis of the service domain even further and, enables a clear picture of the nature, needs and resources of a community to be established.⁴

The interpretation of what is meant by the service domain may be extended further to include data relating to the information environment in which a service is operating. Therefore data on types of information need, as well as on the magnitude and pattern of information generation and distribution can be taken into account in assembling a complete description. Evidence on this aspect leads to a better understanding of *how* information need can be met, as well as to whom. An example of such evidence gathering is featured in a study of the scholarly communication environment which was undertaken by LISU under a commission from the Joint Information Systems Committee (JISC). The full report was published in 2002 and a summary of selected results published later.^{5 6}

It is a fact that cannot be repeated too often, nor emphasised too strongly, that users are at the centre of services. Their attitudes, perceptions and, most of all, actions determine in a real sense the ultimate success of services. Whether and how people use services stands as the ultimate arbiter of success in the eyes of all stakeholders -managers, paymasters and the community. What they think of the range and quality of services on offer is equally significant. Gathering information from users regarding the nature and quality of current services as well as their opinions about planned future development is therefore an important part of assembling appropriate management evidence. A refined technique for establishing a wide

array of user responses to academic library services entitled LibQual⁷ has been developed by the *Association of Research Libraries* in the USA, and it is now widely used in the UK. Public Libraries in the UK regularly employ the formal Public Library User Survey (PLUS) to ascertain levels of satisfaction which feed into government performance standards. There is also an equivalent Children's PLUS exercise.⁸

It is worth noting that input from lapsed users and non-users cannot be omitted from consideration either. Ascertaining latent need and demand from these groups can inform innovative service development that extends the user base and takes the service to new levels of provision.

There is a growing interest in mapping the way in which various public services and projects bring about social change in the community, whether it be in reducing the effects of poverty or in increasing health and wellbeing, for example. Soft' or 'social' indicators are used to assess the broad effects of a project, or service on individuals and the wider community. They seek to describe how lives are changed in terms of the 'distance travelled' in personal development and in community cohesion and empowerment. There is scope to explore these issues in relation to the social and cultural influence of public library services, and in some cases academic libraries, through the broad area of social informatics. In the long term these approaches offer a coherent [and bottom up] approach to impact assessment which is well worth exploring.⁹

A recent study of lifelong learning progression undertaken by LISU on behalf of the North East Museums, Libraries and Archives Council (NEMLAC) revealed a range of socially important benefits accruing from projects being undertaken within libraries, archives and museums.¹⁰ What was also apparent was that not all the institutions involved were assembling sufficient performance data, nor exploiting them fully.

The Importance of a Performance Evidence Culture

As note earlier, the successful application of performance metrics to managing services relies on an awareness of their potential coupled with the skills to apply them. Moreover, it is important that these qualities permeate throughout the organisation if real gains are to be achieved. People at a range of levels in the hierarchy who are engaged in service design and delivery can use performance evidence to advantage in achieving excellence. It need not be the sole preserve of senior managers to make decisions using evidence. In many cases those nearer the point of delivery are well placed to assess service demands and determine operational priorities at the local level, and their capabilities are extended with adequate and relevant information. Furthermore, even in these automated times,

much evidence has still to be acquired and reported with human intervention. If there is an appreciation of the importance of that information, then it is more likely to be handled more carefully, and those involved will be more assiduous regarding data accuracy and reliability. In short, an organisation with a culture of using evidence from top to bottom reaps many benefits; and those benefits ultimately accrue to the users.

Examples of Performance Evidence in Practice: The EBM in Action Project

LISU has worked with one library and information service in the UK on an extensive programme to develop an evidence based management culture at all levels in the organisation. The collaborative project with the Lancashire County Library and Information Service stemmed from an initial arrangement for LISU to undertake, on a consultancy basis, an examination of the use of performance evidence within the Service and to conduct an independent and comprehensive performance ‘health check’ featuring local and national data and standards. The scope of the work was enlarged when the Museums, Libraries and Archives Council (MLA) offered to contribute additional funding with a view to discovering a range of generic factors regarding the practical application of evidence based management. This allowed a more sophisticated project based approach that not only saw aspects EBM being applied, but also mapped in some detail the process and the effects of doing so. The project has a dedicated website at: <http://www.lboro.ac.uk/departments/dils/lisu/lancs/home.html>

The preliminary phase of the project featured a detailed analysis of the Service’s strategies and operations together with an examination of practices in evidence gathering and use. They involved several stages: service mapping, evidence audit, information flows tracking and applications assessment. Put simply and briefly, we sought to discover of the Service: what do you do; why do you do it; how do you evaluate what you do, where does the evaluation data go and what is done with it? Our brief was not to question service priorities or strategy, but to scrutinise the philosophy and practice of assessing performance. The work involved desk based examination of a considerable number of paper and electronic documents as well as data sources. This was followed by telephone discussions/interviews with individual members of the Service. Two Colloquia were held with staff at various levels to establish further detail on policy and practice. An outline of one such is appended. It was evident that the Service displayed an enlightened approach to service quality and performance issues. In this context LISU’s role as an objective and independent critical friend would contribute to further achievement in this context. Observations on the suitability of particular evidence and the methods of collecting, distributing and using it could be made.

We were particularly keen to explore more cost-effective evidence gathering methods and to find ways of simplifying the range of data needed. The latter aim is less easily accomplished than might be imagined because data that may be redundant locally may be demanded by external agencies.

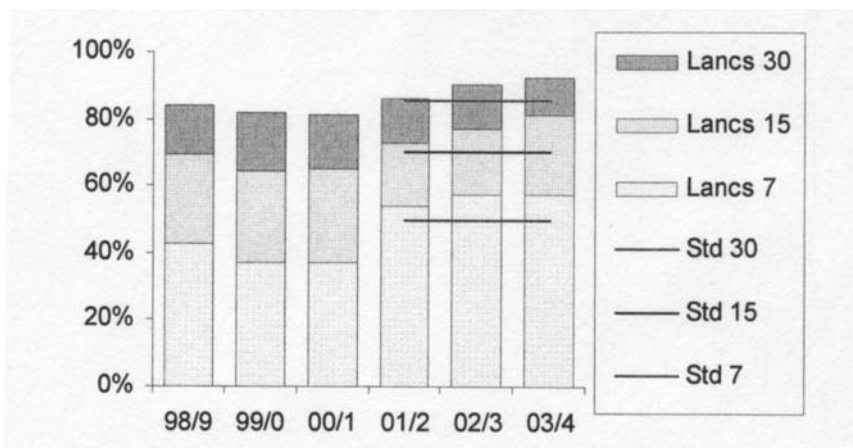
It was recognised that if the EBM way of working was to be embraced rapidly throughout the Service in a systematic and consistent way there was a need to consult, to inform, to train and to enthuse at all levels. A series of Workshops were delivered over the lifetime of the Project to disseminate knowledge and inculcate skills. The early Workshops covered the foundations of data gathering, analysis and use with the main input from LISU specialists. Later Workshops featured increasingly case studies of local EBM applications in the Service. One measure of the success of the Project, over time, is the extent to which the initiative in Workshops gradually shifted from LISU to the staff in the Service as they became more adept at identifying and acting upon the potential of EBM. Outlines of two early workshops are appended.

As the Project evolved, work was undertaken on developing a formalised approach to evidence gathering and dissemination that would inform policy and practice in the Service and support those applying EBM. The initial conception of creating a Performance Manual gave way to the development of a Performance Resource which was launched as an electronic resource linking practical guidance with data sources on the organisation's Intranet to form a 'one stop' resource that is accessible to all members of the service. The landscape of EBM is ever changing so this will evolve as tool and work will continue for some time. The ready availability of the Performance Resource as a working tool reinforces the development of an EBM culture.

Another important component of the Project, and one which LISU is frequently asked to undertake, featured an assessment of service performance with reference to recognised standards, specified organisational objectives or comparator services. During each year of the Project LISU statisticians have performed such an evaluation or 'health check' using the Service's performance metrics. These have proved informative in tracking the progress of the service and in supporting the EBM initiative. The emphasis has changed over time from simply comparing performance against standards to assessing the contribution that the Service makes to defined community goals.

The figure on the next page shows just one example of how the analysis is presented. In this instance it charts the service level improvement over time in meeting book requests and it demonstrates how performance now exceeds the national standard.

The Evidence Based Management in Action project drew to a close a few months ago. The undoubted success of the Project is apparent in the way that,



Percentage of requests met in 7,15 & 30 days.

over time, and as envisaged, the initiative for development and innovation had transferred from LISU to Lancashire where the evidence based culture is now well embedded.

Examples of Performance Evidence in Practice: The Books Connect Project

It is not only in the delivery of regular services that EBM has a role. It can be instrumental in ensuring the success and sustainability of specific projects and initiatives. A systematic EBM approach to projects offers information about whether effort, time and material have been applied to good effect and offers the possibility of demonstrating the need for further projects. A catalogue of questions can be addressed including whether, or to what extent objectives were achieved, how appropriately resources were deployed and what overall benefits accrued to the activity. In addition, the evidence can identify the scope for improving processes and performance if projects are to be repeated.

An example in which LISU has been involved highlights the use of evidence in the successful delivery of a special project. A fuller summary has appeared elsewhere.¹¹

LISU was commissioned to contribute to the evaluation of a reading promotion project which was centred on the East Midlands Region of England in 2002. The project, entitled *Books Connect*, featured collaboration between libraries and other cultural agencies including museums, archives and the arts. It was envisaged that the Project would nurture new creative partnerships between the

agencies through the theme of books and reading and, in turn, new audiences and venues for reading inspired creativity would emerge. In the event the Project proved quite successful; so much so, that a second series of events was undertaken.

The *Books Connect* Project comprised 13 individual events or initiatives that took place in nine public authorities in the East Midlands. These individual events were very varied; involving different art forms, venues and partnerships, and featuring workshops, displays and performances.

LISU's contribution to the evaluation presented interesting challenges and opportunities. The diverse character of the activities featured had to be taken into account and in addition to measuring the basic inputs and outputs of the initiatives, the impact of cultural participation and creative activity needed to be explored. The evaluation also had to focus on the experiences of the different groups involved including; the audiences for events, participating artists and performers, as well as the staff of libraries and other cultural agencies organising the initiatives. One of the most important aspects of the work was that the evaluation could be designed into the project at an early stage.

For the Project, LISU developed a purpose built evaluation toolkit that was suitable for the entire series of activities being arranged. A toolkit approach ensured that both quantitative and qualitative data were recorded consistently across the region. It comprised a set of audience questionnaires and interview schedules, as well as templates to gather reviews from initiative co-ordinators and accounts of artists and partners' experience of events. It included guidance as to how the collection of project evaluation material should be undertaken. The toolkit and full evaluation report¹² are published.

It was important that the toolkit was flexible and adaptable in order to suit the individual nature of each of the events. Not all of the toolkit had to be used in each case. On the other hand, sufficient data needed to be gathered to render comparisons possible. At the same time the toolkit avoided being over-prescriptive and it allowed room for the individual organisers to use their initiative in the evaluation, particularly in terms of soft indicators. In practice, some additional means were used to collect qualitative feedback and to gain an insight into how the Project enriched the lives of those involved. These included sketchbooks, photographs and audience evaluation forms tailored to specific events. Another important aspect related to the cost, in terms of staff time and material, of using the toolkit. The ease with which it could be employed was also a factor - it was not intended to be applied by professional evaluators.

The toolkit was designed in consultation with a Project Steering Group as well as those directly involved in organising the events. It was essential that evaluation was built into the planning stages of the Project, as this ensured that all the

required information was collected from the outset. A one-day workshop was held at the start of the Project to begin the process by raising awareness of the importance of evaluation, and to gather ideas and views about how this could be most usefully achieved. This featured a presentations from LISU staff on the basics of quantitative and qualitative evaluation and was followed by a brainstorming session, in which participants completed various exercises involving evidence gathering and use. The Workshop not only enable the approach to evaluation to be refined, but also encouraged those involved to 'buy into' the idea of project evaluation.

All of the participating local authorities used the toolkit to collect evaluation material. In the event, an encouraging amount of positive feedback and data was received. This was supplemented with contextual information supplied by the Project Manager.

The success of the evaluation exercise owed a great deal to the cordial working relationship established between LISU as contractor and those responsible for managing the Books Connect Project as clients. We wish particularly to thank Debbie Hicks of the Reading Agency for her cooperation.

Evidence in Benchmarking

Benchmarking using appropriate performance evidence enables useful comparisons to be made within and between services. Comparative benchmarking, depending on the context, enables the manager to:-

- evaluate the performance of various services, or service points within an organisation
- evaluate the overall level of organisational performance
- compare service performance over time
- compare with other similar institutions
- compare against recognised standards.

Strategic benchmarking explores a series of key service parameters to assess overall performance. Process benchmarking compares and reviews the detailed aspects of specific activities and methods in organisations and it implies a level of collaborative exchange of data. Both approaches offer considerable scope for identifying areas for development and improvement as well as evidence for advocacy.

LISU has undertaken several strategic benchmarking exercises on behalf of academic library information and library services. Typically, the process involves identifying, in conjunction with the client, a set of appropriate institutions with which to compare data and then determining the various performance data that will be analysed. The challenge is to identify suitable comparators which are similar in size, character and culture. To obtain a wider picture comparisons may

also be made against the national mean values. The results can often reveal aspects of the service that are comparatively strong and which exhibit excellence. At the same time they can reveal areas in need of investment and development. They equip the manager with evidence to undertake strategic planning and strengthen the arguments for resources. The data rarely offer ready made solutions, but they do point to areas for scrutiny and suggest questions that should be asked. The manager retains the initiative.

Operational benchmarking entails sharing and comparing detailed cost and performance information on quite specific operations and processes within a group of institutions. The outcomes can be used to identify relative best practice and from the knowledge gained local operations can be reviewed and processes re-designed. Since much of the data needed may be sensitive, this level of benchmarking relies heavily on the cooperation and trust of those participating, and a degree of confidentiality within the group, if the necessary level of transparency in describing activities and costs is to be achieved. The potential benefits of participating in such activity are, however, considerable in terms of improved services and methods, as well as increased awareness of practices. LISU has, for some time, maintained a fruitful association with a benchmarking consortium of academic libraries in England and recently published on their behalf, a comprehensive report on their activities.¹³ Aspects covered include: off-campus services, shelving processes; advice desk activities and short loan collection operations.

Conclusion

This paper has sought to demonstrate the importance of performance evidence to successful service design and delivery. It has also emphasised that using performance evidence should permeate the culture of a service and has shown how this may be achieved. There is growing use of such information, and in some parts of the public sector a requirement to report it which clearly acts as a stimulus. However, there is scope for development both in the nature of evidence gathered, and in the way it is used. There remains much work to be done in refining methods and techniques and managers need to become even more active in anticipating the need for, and using appropriate performance evidence. Taking a measured approach to library management yields substantial benefits that must be grasped.

Notes

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Appendix A

Evidence based Management in Action
Lancashire Library Service and LISU

Project Seminar for Operations Group
Monday 17th February 2003
12.30pm – 4pm
Venue: Gujarart Centre, South Meadow Lane, Preston

12.30pm Buffet lunch

1.00pm Introduction to project

What are we trying to achieve?
Data collection and accessibility?
You will be asked to think of examples of data
and statistics you collect
during the course of your work.
How do you collect these?
Why do you collect these?
Where do the statistics go?
How accessible are the statistics?

2.30pm – 2.40pm Tea/Coffee

Discussion

Evaluation of data
What analyses do you do?
How do these analyses relate to service delivery?
Are there any analyses you would like to have?

Are there any statistics you collect at present which you feel are **not** necessary?

Next Steps

Evaluation of this project.
Looking forward to the workshops

4pm Finish

Appendix B

Evidence Based Management in Action Lancashire Library Service and LISU Workshop for Operations Group Staff

Date:- Tuesday 18th March 2003.

Venue:- Jarvis Hotel, Leyland

Time:- 9.15 am-3.30 pm.

9.15 am. Tea/Coffee

The workshop will comprise a linked series of short presentations and 'workshop style' exercises.

9.30 am. Welcome back and outline of today's programme.

9.35 am. Evidence and Performance Assessment.

9.55 am. Mission, aims and objectives

10.25 am. Range and applications of data

10.40 am. Types of useful evidence.

11.00 am. Tea/Coffee

11.10 am. Evidence acquisition methods.

11.30 am. The forensics of evidence.

12.30 pm Buffet Lunch

1.00 pm. Statistics for the faint-hearted.

1.25 pm. Handling live evidence safely.

2.25 pm. Tea/Coffee

2.35 pm. Evidence sharing.

2.50 pm. Building a foundation for sharing.

3.10 pm. EBM begins at home.

3.25 pm. Summing up.

3.30 pm. Close

Summary

Performance evidence plays an important role in the management of modern information and library services. Managers seek to achieve an array of objectives and undertake a whole range of activities. How well they manage is influenced by access to appropriate and reliable supporting evidence and their capacity to utilise it intelligently. This paper outlines the general context of managing through performance evidence and draws on experience acquired by LISU, firstly to discuss how a culture of managing with performance evidence may be developed in an organisation and, secondly to describe, with examples from different organisations, the scope for applying performance evidence to service development.

Information and library services facilitate access to information, they provide space for the community to engage individually or collectively with information and they offer stimulus through a range of formal activities. Information and library services serve as many faceted agencies because their user community draws upon them for learning, leisure, work and living. These represent a formidable array of functions and demands. Performance evidence, built on a solid foundation of service goals, has an important contribution to make to their management. The portfolio of performance data is vast and varied and ranges from hard quantitative data to the softer social indicators that are growing in importance and relevance.

The successful application of performance metrics to managing services relies on an awareness of their potential coupled with the skills to apply them. LISU has worked with one library and information service on an extensive programme to develop an evidence based management culture at all levels in the organisation. The project has entailed an analysis of strategies and operations, an examination of evidence gathering and use, and it has featured training workshops and service assessment health checks performed by LISU. The outcomes are encouraging in terms of the utilisation of performance evidence and service quality as the examples in the paper illustrate.

Performance Health Checks offer a tangible way of assessing the position of a service in relation to internal targets as well as national standards. Extracts from LISU's work in this area are presented to illustrate specific service improvement and development over a time frame.

Performance metrics also enable the overall performance of specific projects and initiatives to be assessed. LISU was engaged in the development of a toolkit to support the evaluation of a series of reader promotion activities in the UK. The evaluation covered a whole range of factors including inputs and outputs as well as impact assessment through data regarding user reactions. Examples indicate how the evidence identified the success of the activities and facilitated advocacy to support for further work.

Benchmarking using appropriate performance evidence enables useful comparisons to be made with similar organisations. The challenge is to identify suitable comparators which are similar in size, character and culture. Strategic benchmarking explores a series of key service parameters to assess overall performance. Process benchmarking compares and reviews the detailed aspects of specific activities and methods in organisations and it implies a level of collaborative exchange of data. Both approaches offer considerable scope for identifying areas for development and improvement as well as evidence for advocacy, as examples illustrate.

The paper concludes with an observation that managers need to become even more active in anticipating the need for, and using appropriate performance evidence.

Statistics and Strategy: Statistics and Performance Measurement as a Social Process

Ulla Wimmer

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at the German Library Association,
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The aim of this paper is to point out some thoughts on the strategic use we can make of Statistics and Performance Measurement. The key issue is the assumption that statistics and performance measurement should make a contribution to strengthen the position of libraries - or a single library - within their funding bodies and the social field they are set in. If we can agree that this is an aim of working with numbers, the question arises: what is necessary in order to realize the full strategic potential of statistics and performance measurement – and not get trapped in the pitfalls? In my opinion, it is much easier to use the strategic potential of statistics and performance measurement if you look at them as a social process. This is what I am trying to do in this paper.

A side effect of this way of looking at statistics and performance measurement is, that it can give a positive twist to some of the arguments that are often held against statistics and performance measurement. This refers especially to the common thoughts that “numbers never tell the whole story” and that “numbers can be turned this way and that”.

In order to make my points, I would like to talk about 4 theses and their consequences:

- 1 The aim of statistics and performance measurement is to *simplify* Information
- 2 Statistics and performance measurement are about Agreement, they *create* Truth
- 3 Numbers need Meaning - they *never* speak for themselves
- 4 Statistics and performance measurement are about Knowledge *and* about Politics

Some of the thoughts may seem obvious from the point of view of information science and mathematics. But from the point of view of the practice of doing library statistics (at least in Germany) they are not obvious at all.

1. The aim of statistics and performance measurement is to *simplify* Information

I would like to start with a small but fundamental misunderstanding, that I find very often when talking to people about statistics. The common view is: statistics and performance measurement generate new information about the library. They tell us things we didn't know before.

This is true. But if you look at statistics from the point of view of systems theory, you find that statistics and performance measurement actually reduce information about the library in a very efficient way. Reducing complexity - making things simple - is necessary in order to be able to act and make decisions about the library.

This may seem strange at first, because we do gather information and data that we didn't have before. But if you look at a simple statistical number like the number of staff, it turns out that, in order to get this number, you have to aggregate a long range of variables into one single number:

- professional staff
- non-professional staff
- posts planned
- posts occupied
- percentage of sick leave /absentism
- volunteers
- apprentices/trainees
- cooperations

So the number of staff is in reality a crude simplification of the real situation within in the library.

Other simplifications occur all the time when doing statistics, e.g. when you draw a line where there is actually a gradual transition (this applies e.g. when you categorize libraries according to size or other categories). Simplification occurs even when you just set a deadline: this means you tell "the truth" about a certain point in time, and this excludes developments or corrections after a certain date. You have to do this, though, in order to create fixed information that people can refer to (e.g. in citations or in planning papers). If you apply statistics, you systematically exclude innumerable details from the picture.

The consequences are: statistics and performance measurement make things simpler. This is usually painful for some parties involved in the statistical process, because a feature they find important is not included in the picture. And it is *bound* to do some party or some library wrong, because their special situation is likewise not reflected in the statistics. (E.g.: a library would be better off if it fell into the next higher category of size.)

This is one of the arguments held most often against statistics and performance measurement. I would estimate that 80 % of all fights over statistics are about something that is left out of the measurement. But still, this simplification is NOT a short-coming, but a strength! It is the reason why we measure in the first place.

If you don't realize this, it is possible that you get stuck on the search for the perfect statistics tool. This pitfall works like this: if we only try a little harder, if we improve this definition, if we make that rule more precise, if we include this indicator – we will get the full picture that shows everything and does nobody wrong. You have to realize, however, that this is, by definition, impossible. The aim of statistics is to reduce the amount of information.

If you don't realize this in time, the search will go on for ever. This is not only useless but dangerous, because the time *spent* on the quest for “the perfect” statistics and performance measurement-tool is time *lost* for interpretation and communication of results to the funding bodies.

This, in turn, is important, because the inevitable loss of information created by statistics and performance measurement must be compensated by interpretation and negotiation with the people who read the statistics in the end. It therefore is necessary to see the point from which you have to stop working on tools and start working on the results – even if some aspects of the real situation are not sufficiently reflected in the measurement.

This, of course, does not mean that you might as well be negligent or careless when creating numbers. It is necessary to be as precise and exact as possible when creating a questionnaire or gathering data. But the gathering of data is not an aim in itself. It is the first step in the process and you must make sure to have enough time left for the other steps.

2. Statistics and performance measurement are about Agreement, they *create* Truth

My second thesis is, that statistics and performance measurement do not work like a machine that is set once and for all and can't be influenced. A common idea is that you use a certain statistics or performance measurement tool, and in the end you find the scientific truth about a library. This is only half of the picture. What *is* actually fixed by the current state of science (and even that changes over time), is the framework for statistics and measurement:

How to do cost analysis is defined by business administration
How to properly create survey data is defined by empirical social science
How to deal with that data is defined by mathematics
How to measure library specifics is defined by library science

But within this framework, when you create a statistic or a measurement tool, you still have innumerable choices and options on how to count and what to calculate. And they are, to a certain extent, arbitrary. You can settle them this way or that way. These options are negotiated between all parties involved. (This is one of the things that critics of statistics and performance measurement usually point out as a prove of the “unreliability” of statistics. In my point of view, it is one of its greatest strengths: statistics can be used and adopted to many different issues and purposes. This is why they are so useful.).

Just one example: if you set out to calculate the cost of one loan in a library, you have several options:

1. You use the total library budget and divide it by the number of loans, e.g.:
4 mil Euros : 200.000 loans = 20 Euros/loan
2. You use the acquisitions and media processing budget and divide it by the number of loans, e.g.: 400.000 Euros : 200.000 loans = 2 Euros/loan
3. You use the cost of check-out and re-shelving and divide it by the number of loans, e.g.: 40.000 Euros : 200.000 loans = 0,20 Euros/loan

The point is, that each of these calculations is correct. Each of them creates a different view on (a different “truth”) about the library. Which option you choose depends on what the parties involved in the measurement want to achieve or to find out. You have a choice which method to use, but you can’t choose on your own. And, this goes without saying, once you have chosen the method, you have to execute it with the utmost care and scientific precision.

So I strongly believe that statistics and performance measurement are about objectivity and truth. They are the only way of finding out knowledge beyond your own personal perception. But they don’t find the one and only truth, they create a specific truth, and this truth is a common view on the library that all parties involved have agreed upon. To agree on a common option is done within a political process, a process of negotiation. The parties involved may be:

library management
funding institution
library staff
state agencies / general public

If the funding body of a library does not agree with option 3, then the measurement of the library is useless, because it won't be accepted by the recipient of the statistics. If the library staff do not agree with option 2, there is also the danger that the measurement will be useless, e.g. because data is not being gathered properly. So in this respect, statistics and performance measurement are as much a social and communicative process as a mathematical or methodological process. The view on statistics changes significantly if you regard the negotiation process that creates it as a central issue, and not a side effect or even a disturbance variable that should be ignored or excluded from statistics as far as possible.

And even more important: if you realize that there is a creative choice when measuring, this offers various opportunities: when working with statistics, it is necessary to know and use all sorts of methods, data and sources. Why not combine cost analysis with the critical incident technique? Or compare library performance indicators to data from banks, football stadiums or public transport? Use all possible options for the development of tools.

This is an opportunity, but also a challenge. You have the choice of methods, but which ever you choose, you must be able to execute properly and according to the scientific standards. This requires a very broad and firm knowledge of a variety of social science and business administration tools.

The most surprising consequence, however, is that people who work with statistics should bring along a lot of creativity and inventiveness - apart from methodological knowledge. Currently, these are not the main requirements when choosing or allocating staff to statistic tasks, but they definitely should be.

Another practical consequence for those who work *for* libraries (not *in* a library) might be to give advice not only on one method to use, but on the variety of methods available. Also, they should make libraries sensitive towards the importance of negotiation, communication and interpretation when working with statistics. This is as important as giving instructions on how to count and how to calculate.

3. Numbers need Meaning - they *never* speak for themselves

My first thesis said that statistics and performance measurement are so important and useful because they create a simple picture of the library that enables library management and funding bodies to act and make decisions. The third theses says that *because* they create a simple and out-of-context image of the library in numeric form, the results of statistics and performance measurement are never, ever self-evident.

We tend to forget that, because we know the tools and we deal with libraries and their work all the time. We look at the results as insiders. The meaning of some

numbers seems obvious to us, but it is not, if someone from outside the library looks at the same numbers. It is quite surprising, what strange meanings people can give to numbers that seem to have quite an obvious meaning.

It is important to realize that, if this happens, it is (usually) not the fault of a badly designed statistics tool. (This idea leads directly into the pitfall “search for the perfect statistics tool”). *No matter how well the tools are defined*, the results of statistics and performance measurement can be interpreted in different ways and therefore need to be “enriched” with meaning (interpretation) by the library itself. This, also, is not a shortcoming, but an advantage of statistics and performance measurement, because it offers plenty of opportunities. To determine what a number means, is also a matter of negotiation and communication with the recipients of the results. This is even more the case than when creating a tool. Here are two easy examples:

1. A high stock turnover in a public library could mean
 - a) good stock, good acquisitions policy or
 - b) not enough stock per capita, people borrow everything they can get hold of
2. Very low staff expenditure could mean:
 - a) a lean, efficient library or
 - b) a low standard of service.

Even more options are available for the interpretation of a library ranking:

1. No. 23 out of 40 in a library ranking means:
 - a) Library has a solid, healthy middle position
 - b) Library is just average
2. No. 1 out of 40 in a library ranking means:
 - a) super library, good investment
 - b) library could do well enough with less resources
3. No. 38 out of 40 in a library ranking means:
 - a) library should be closed down
 - b) library needs significant investment (new building).

This shows us that the consequences of statistics and performance measurement are not so much found in the numbers, but in the meaning we give to the numbers. This means a) you must never be too confident in results that are apparently positive b) you still may get good opportunities out of apparently bad results.

The consequences are: as the meaning of statistics and performance measurement is created not by calculating but by talking, you should consciously include negotiation and communication into the process of „giving meaning to numbers“ – again, they are key issues, not side-effects.

The second consequence is very obvious for every one: You have to put as much time and effort into data analysis and interpretation as into definitions, methods and data gathering. To realize this in practice, we could e.g. try to put analysis and interpretation at the top of the agenda - not at the bottom. This might not be that easy, because for many it seems illogical to work „backwards to forwards“. But remember that each social research project (not to talk about market research) usually starts with a definition of what should be the outcome of the project and what kind of answers should be available in the end (what *kind* of answers – not the answers themselves!).

Another strategy would be to create, in a way, “mixed” working groups, that include people with different roles:

- a) one group who look at tools and methods in detail and
- b) the other group who stick to a broad strategic view on negotiations and interpretations.

This might be an interesting approach because it seems that when working on statistics, you can have either one view or the other at the same time. A group with different roles might be able to cover both aspects.

I have tried to explain, that statistics and performance measurement are much more a communicative issue than we traditionally think. It is important, however, to be aware, that discussions on statistics and performance measurement can be either helpful or rather destructive. Helpful and necessary is work that creates new methods, comparisons and meanings. Also, the strategic negotiation of tools and interpretations is useful. On the other side, endless discussions on “the perfect measurement tool” can be a waste of time, as well as the repetitive re-discussion of arbitrary rules and definitions, just because no-one remembers, why a definition was agreed upon this way years ago. You can reduce this kind of work by personal continuity in working groups or by a good documentation, that records not only the options taken, but also the options *not* taken, and why they were rejected. The aim here is to raise awareness of the danger that we focus on details and forget the big picture. In reality, it is often difficult to decide, which is which.

4. Statistics and performance measurement are about Knowledge and about Politics

The last thesis is in some way a conclusion of the previous three. It says that statistics and performance measurement are as much a matter of creating knowledge on the library as doing politics. By doing statistics or performance measurement, we want to describe the library as good as possible, create a true image of the library that goes beyond our personal perception. This numeric image should be

free from special interests as far as possible. At the same time, all parties involved in doing statistics – library management, funding bodies, staff, library users – want to use that data to prove their points, to realize certain aims and to make decisions about the library. This is the reason for taking the trouble of measuring in the first place. Alain Desrosieres, who wrote one of the most important recent books on the history of statistics¹, describes statistics as “a link between description and management”. This means that statistics always have an epistemological aim – “finding out the truth” – but also, at the same time, have always had the purpose to deliver a basis for decision-making – and this is a political issue.

Take, as an example, again the number of staff in a library. To create knowledge on this subject, you might want to count the total number of staff, but also the no. of qualified librarians, the no. of non-professional staff, staff in administration and maintenance (secretaries, janitors, cleaners, drivers) etc. The political aim of this measure is to calculate e.g. staff cost, the quality of services and in the end perhaps decide whether the library should have more staff or staff reductions.

As a consequence, it is obvious that statistics and performance measurement is a playground for games of power between all stakeholders. This is even more so, because both methods and meanings of statistics and performance measurement are open to negotiation. The game of power is won by the party whose view becomes the dominant meaning in the end and whose interpretation of the results is used as a basis for making decisions.

It is important to realize that work on statistics and performance measurement is work that may have vital consequences for the library. This is one of the reasons why people fight so hard about apparently small numbers. If you lose a librarian because you have a janitor in your library, it seems sensible to fight about whether or not to count the janitor in the statistics. But: in the end, not the counting matters, but the interpretation.

Here it is important to be realistic about what statistics and performance measurement can do, and what they can't. Very often you find two opposing attitudes. One attitude says: statistics and performance measurement are pure science, we use them to create knowledge, they have nothing to do with politics. This is the “statistics as epistemology”- point of view. Those who think like this are unwilling to integrate political / strategic views into the work of doing statistics. This can be dangerous, because it is just not possible to leave them out. They will come

1) Desrosieres, Alain: The politics of large numbers: a history of statistical reasoning.
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back through the back door. They are not disturbances or side-effects, but an integral part of doing statistics.

The opposing attitude says: if we use statistics and performance measurement, the results will speak for themselves. They will prove without doubt, that our library is well used or in need of a new building or understaffed. The numbers will speak for themselves and we won't have to speak for ourselves, i.e. do advocacy or lobbying for the library. This is the "use statistics as management tool" – point of view. This might be dangerous, because it might tempt you to leave the scientific framework that defines the rules for data gathering. It is also not useful because numbers are an instrument in the management and advocacy process, but they can't replace it.

In order to realize the strategic potential of statistics and performance measurement, you should create a synthesis of these opposing attitudes: be aware of the political aspects involved in the measurement: which strategic positions are involved? What aims are at stake for whom? But do not rely on numbers alone to work for you in this process.

As a conclusion: in order to make use of statistics and performance measurement for your library, you might try to

- Not get lost in methodological details
- Work with methodological knowledge, creativity and inventiveness
- Try to integrate communication and interpretation into the process of measurement itself
- Realize the strategic positions of stakeholders

This sociological, rather "holistic" view on statistics and performance measurement might, in the end, contribute to the aim of strengthening the position of libraries.

Abstract

The strategic dimensions of performance measurement

Traditionally, discussions about performance measurement, data analysis and statistics circle around the question which features of library work should be counted, and how. Often, these discussions tend to be very excited and are keenly and suspiciously watched by the library community. Also, if you follow the discussions over a longer period of time, you notice, that the discussions are never finished; e.g. the questions of how to count library users, loans, stock, expenses etc. tend to repeat themselves over and over again.

That experience in mind, the paper will try to explain, why it is, that performance measurement is such a “hot issue”, and what is actually at stake when librarians argue e.g. about whether or not janitors should be included when counting library staff. If you look at performance measurement from a more distant angle, you can see the strategic functions of counting and measuring that are invisible if you just stick to the numbers. This helps to explain, how discussions about performance measurement work, and why performance measurement is such an important playground for games of power between the library and its funding bodies (and other stakeholders).

Comparing libraries: from official statistics to effective strategies

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Arguing with numbers

Statistics is the art of arguing with numbers. In this paper I discuss libraries in the light of official statistics. They are called “official” because they have been collected by governments. But the collector does not really matter. People tend to believe that official statistics are more authoritative than research data. This is not automatically so. Statistics are statistics, whether they are gathered by researchers or by public officials. The methods are similar. We always have to evaluate the methodology used.

The main difference is this: governments are bureaucracies. They have the capacity to produce statistical series: the same data are collected and presented every year. Bureaucracies are stable and conservative like farmers. Researchers are more like hunters. When we get excited about a question, we organize a special expedition - or a project - to hunt down the data we need.

Official statistics are standardized. They are meant to be compared: over time, between libraries, and - increasingly - between countries. Project data are much more idiosyncratic. Every library researcher tends to develop her own way of collecting and presenting information. This weakens the impact of research. Library research often suffers from a lack of integration. We end up with a multitude of library snapshots - not a systematic body of knowledge.

To understand libraries, we need better pictures of the social landscape. A good approach is to study official statistics in depth - and to combine regular statistical data with project information. Official statistics show the broad framework, while project data provide depth and detail. Both sources should be utilized. Arguments from statistics and arguments from surveys should also be confronted. They do not always tell the same story. I feel encouraged, however, by the growing sophistication of library statistics and library research. Let me mention three examples:

1. **In Europe**, the European Commission is investing heavily in cross-national projects. The LibEcon (Millennium) study published in 2001 (see Bibliography) represents a great advance in standardizing and comparing library statistics between countries.

2. **In Great Britain**, the Department of Information Science at Loughborough University runs an outstanding research and information centre (LISU) that concentrates on library and information statistics. They publish a wide range of publications. The two volumes called *Perspectives of public library use* (1995, 1999) are particularly valuable. These books gather information from widely scattered sources and present it within a common framework.

3. **In Norway**, funding of higher education is increasingly based on results. Since the results must be measured, we now have much stronger systems for collecting data on students and on outputs from research. This means we can monitor the flow of library students (1) and of library related publications (2) much more closely than before.

Quantitative research and official statistics

The gap between official statistics and academic research is diminishing. Government actors are becoming more data hungry. They are willing to invest more in data collection and data management. They increasingly turn to occasional (or periodic) surveys to gather detailed information on particular topics - like time budgets, media use and cultural statistics. Such data are highly relevant for library researchers.

In the past, official statistics had to be gathered from printed publications. We could not go beyond the formats and the cross-tabulations that the statistical agency had chosen. Today, more and more countries make their statistics available as databases. The most advanced countries - which definitely include Norway - encourage users to select, manipulate and download complex sets of information from these databases. This increases the value - one could even say the productivity - of the data. We get the same type of access to official statistics that we have to our specially gathered project data. Combining them is both economically efficient and methodologically exciting.

At the same time, research communities are building stronger infrastructures. The institutions that fund research want research programs rather than individual projects. Collective undertakings create social links between researchers and lead to more cumulative studies. Projects build on previous projects. The bricks are stacked in walls rather than scattered on the ground.

This means that research data approach official statistics. Surveys may be repeated on a regular basis. The LISU unit at Loughborough is one example, with publications like the annual *Survey of Library Services to Schools and Children*.

We find more longitudinal data, where people or institutions are studied over long time periods. In Norway, we can mention StudData - a massive study of students in twenty different professions - including librarians. The project uses a cohort approach (3). It will run for ten years and provide a vast amount of data on educational choices and career experiences.

An administrative view of the world

Here we consider the role of official statistics rather than statistics in general. Official statistics are usually collected for administrative purposes. Statistical systems provide, we might say, an administrative view of the world. Since data collection is costly, official statistics tend to concentrate on data that are gathered in any case, as a part of the normal work of the organization. All libraries register their book stocks, their accessions and their loans. Thus we have good data on collection size - but not on collection quality. We know the number of new books, but not their relevance. We have detailed information on loans, but not on reading.

The statistics we are offered give, necessarily, a limited and biased picture of libraries. We must use them with caution. When we study the library world, we should keep data at a distance. If we *start* with statistics, we are easily caught by the administrative worldview. It is better, I believe, to start with the questions we want to explore. Relevant questions are more important than random facts. The proper use of library statistics requires good theories, good models and good questions. Official bodies often seem myopic. They watch their numbers too closely. They tend to discuss tables rather than the issues tables are meant to illustrate.

The simple inductive approach is dangerous. It is very hard to draw interesting conclusions directly from data – with no theory to guide your analysis. Data must be interrogated closely and forced to answer *our* questions. Corporations speak about *data mining*: extracting valuable information from the barren rock that surrounds it.

The total amount of information on European libraries is vast and growing. In our computerized society, data systems generate much more information than we can digest. To survive, we must retreat from the flood. The ocean of data should be watched from a distance. To develop interesting questions we need a conceptual platform beyond statistics. Data bound research tends to be boring research. In other words: explore your data from above.

The countries of Europe are turning from industrial to knowledge based societies. In that process the social role of public libraries is changing. Their main services continue as before. Libraries still lend books, answer questions and provide space for a great variety of social and cultural activities. But the interpretation of library services change. In industrial societies, culture and education are secondary sectors,

somewhat divorced from *real work*. Our children were educated before they started working - and adults enjoyed culture as a form of recreation outside working hours. A skilled worker was skilled for the rest of his life.

In knowledge societies, production is based on constant learning and continuous innovation. Technologies and markets change rapidly and need organizations - as well as individuals - that are able to adapt, learn and develop. Culture and leisure are becoming major economic sectors in their own right. Highly educated people try to fill their lives with rich, intense, and meaningful experiences - both at work and in their spare time. This is a challenge to public libraries.

Libraries are funded by the government, national or local. They depend, in the long run, on the willing support of the electorate. Their role in industrial society was well defined and widely accepted. Politicians and voters understood the value of library services and were willing to pay for them. But their role in knowledge societies looks less evident. The traditional arguments have lost much of their force. Politicians often seem less committed: their hearts are not engaged. If voters follow their lead, public libraries will lose their broad political support. In several European countries, we believe, this is starting to happen.

The art of counting

Mathematics deals with numbers in their pure form - the properties of number as such. Statistics deals with numbers from the real world. Official statistics is mainly concerned with numbers derived from counting. The natural and social sciences get much of their data from measurements - of size and weight, of strength and color. Such common-sense categories are only the beginning. They are supplemented by all the subtle properties developed by the disciplines themselves: wave length and viscosity, acidity and ecological diversity, general intelligence and cross-pressure. But library statistics is mainly about counting. By counting, we make an ontological statement. We assume that the objects we count are, in some meaningful way, similar. When we count the number of seats, volumes or PCs in a library, we implicitly treat seats, volumes and PCs as useful categories. By counting, we also assume that the *collection* of objects is meaningful.

Every count ends with a number. That number must describe something worthwhile. In statistics, a collection of similar objects is often called a population. By counting we find the size of sets or populations. The total number of seats is the *capacity* of the library. The number of volumes is the *size of collection*. I stress this point because it is so easy to stumble. How should we count librarians? How should we count libraries?

Counting librarians

To the average user, librarians are people who work in libraries. A librarian is somebody who takes care of books, who answers questions and who keeps the library in order. They are essentially defined by the work they do. In libraries, users care about competence and service, not about formal degrees.

To the sociologist or economist, librarian is an occupational category. In STYRK - the Norwegian system for classifying occupations - we find fourteen different types of librarians (4). Norwegian library statistics use another approach. A librarian is a person who is legally qualified to direct a Norwegian public library. This definition has a political background. In Norway, librarian is not a protected title. There is no roster of registered librarians. But all heads of public libraries are supposed to have a recognized library degree. Librarian is an educational category.

A *recognized librarian* was, till recently, defined as a person who had completed a first degree in librarianship at the School of Librarianship in Oslo - or its equivalent. People with library training from other schools could apply for recognition. But approval was not a formality. In Norway, an American with a master degree in library and information science was not automatically qualified to run a small municipal library. The person would also need the right mix of academic subjects.

There is an additional complication. Norway has about four hundred municipalities. Many of these are quite small. Forty percent have less than three thousand inhabitants. In most of the small communities, libraries are run on a part-time basis. Even the part-time directors are supposed to have a professional qualification. The outcome is not surprising; the law must bow to reality. Recognized librarians stay away. They are not attracted by part-time positions in remote areas. When no qualified person is available, exemptions are granted. The part-time libraries are mostly headed by people with some formal training - and lots of practical experience - but without recognized degrees. They are librarians in an occupational, but not in an educational sense.

Population	Lacks formal qualification	Part-time position	No. of libraries
> 7 500	3 %	6 %	132
3-7 500	28 %	35 %	143
<3 000	66 %	80 %	160

Table 1. *Municipalities by population size. Library directors without formal education and directors in part-time positions. Percent. Norway 2003.*

The moment we want to compare Norway with other countries, difficulties multiply. The conclusion is clear: statistics should not be taken at face value. To understand what the *number of librarians* means, we must know a bit about the way libraries and library training are organized. In order to compare countries, we must study the library systems behind the numbers as well as the numbers themselves. Let us apply this rule to our main entity: the Library.

Counting libraries

In a superficial sense, Norway has more than four thousand library units - and less than three thousand qualified librarians. But saying that Norway has four thousand libraries – or one library per thousand inhabitants – would give a misleading picture of the landscape. Most of these library collections belong to primary schools with no qualified library staff.

Norway has three thousand primary schools - with a total stock of nine million books. If you pick a Norwegian library, at random, for inspection, you would most often end up with a single room, in a primary school, containing a few thousand books. We also have four hundred secondary schools, with a joint stock of 2.5 million items. In secondary school, libraries are bigger and better staffed. But they are still small. In terms of size, the average secondary school library corresponds to a tiny municipal library – for a community with about twelve hundred people.

Before we count, we need to define meaningful categories. I suggest three groups: public libraries, specialized libraries and school libraries. We have said something about school libraries. But how many public libraries and how many specialized libraries (academic + special) does Norway have?

Public libraries

Every local authority has its own public library headed by a library director. Since Norway has 433 municipal units, we should have 433 independent library organizations as well. There is a small catch: municipalities are allowed to set up joint public library systems. So far only two local authorities - Tønsberg and Nøtterøy - have taken this opportunity. We therefore have 432 public library units.

There is a bigger catch. We also have eighteen *county* libraries. In Norway, the county libraries are not open to the general public. They function as regional resource centers. They assist municipal libraries with inter-library lending, with deposit collections, with training and with technical support. The county libraries are part of the public library sector, but their statistics are published separately, in a different format and with less detail.

Thus, we end up with 450 public library organizations. This is, statistically speaking, our *population of public libraries* in the year 2004. The number was

larger in the past, when the country had more than seven hundred municipalities. It will be smaller in the future. A few years from now the municipal map will probably be redrawn, creating fewer, larger and stronger units. It is also likely that more municipalities will choose the joint library option. At the county level, a regional reform is looming. Most probably, Norway will be divided into seven (or five or nine ...) regions, each with their own regional library unit. How executive power then will be divided between the municipalities, the new regions and the state in the future, is quite uncertain, however. But at the moment Norway is characterized by a large number of small libraries. In terms of population, the average local authority has ten thousand inhabitants - and is served by a library with two librarians and two supporting staff.

Specialized libraries

The moment we turn from public to specialized libraries, we are in for a surprise. In 2004, Norway had four universities - but fifty-five university libraries! The statistics also show that Norway has *three* national libraries (5). The answer is simple: in our statistics, each physical branch is counted as a separate library unit. Standardization is never easy. Before 2002, statistics on public and statistics on specialized libraries used to be collected by two different institutions. They were not always the best of friends - and chose different ways of presenting their data.

The population of specialized libraries is much more heterogeneous than the population of public libraries. All municipal libraries have the same mission and serve the same type of constituency. For many purposes they can be treated as a set of actors with similar interests and concerns. To understand the political dynamics of the specialized libraries it is better to divide them further, into three meaningful subgroups: academic libraries, special libraries and the one and only National Library.

Today, Norway has about sixty academic libraries. In the past, they might lead quiet lives inside their mother institutions. Today, everything is in flux. Their fate is totally dependent on the future of Norwegian universities and colleges. Every academic institution has a library. This will still be the case in five or ten years. But the size, the role and the future significance of the libraries in higher education is uncertain.

Throughout Europe, higher education is changing. The Bologna process is only the first step towards an open European market for higher education - and lifelong learning. Academic libraries must earn their position in new and unfamiliar settings. Current library statistics hardly touch on such issues, however. The indicators that are collected reflect the stable world of the past rather than the turbulent changes in our future.

Counting special libraries is rather more difficult. As we descend the size ladder, from full scale libraries towards smaller units, professional staff disappears. The libraries themselves dwindle into book collections. But there is no clear cut-off. Current statistics include about 150 library entities. Most of these are small - the average number of staff is below two. Many special librarians work alone. They have their own network of single staff libraries (6) - with about sixty registered members in the summer of 2005.

The National Library has a social role of its own. It is the biggest library institution in Norway, with a staff of about 350 persons. It has the greatest concentration of professional and technical expertise in the country. Its collections are unique in size, depth and permanence. The mountain vaults in Rana, near the Arctic Circle, are aimed at the distant future. The documents will still be readable when a small European country called Norway has become a distant memory.

Typical entities

In daily life, we are accustomed to populations that are bunched in the middle. Statisticians describe them as bell curves. Take dogs. Some are tiny like the chihuahua. Some are massive like the Grand Danois. But the dogs we most often meet are medium-sized like terriers, rottweilers, Irish collies. These are our normal or typical dogs - the breeds we have in mind when we speak about dogs in general (Lakoff, 1987).

With libraries the same reasoning applies. Whenever we speak about books, or users, or librarians, we refer to mental images. Images hover in the back of our minds and guide our thinking - often quite unconsciously. People tend to understand each other if their images overlap. They start to misinterpret each other if they diverge. The words they use may be identical. But if the internal pictures differ too much, communication suffers.

Bell curves assist communication. Since bell-shaped distributions have clear midpoints, it is easier for images to converge. Some books are thick and some are thin, but most run to a couple of hundred pages. There are library patrons that borrow fifty or a hundred books a year. A few never take a book home. But the typical user lies in the middle - in Norway he or she checks out maybe ten items a year.

But the bell curve is not the only possible distribution. Take print-runs. In Norway, most books are published in small editions. The typical novel is distributed in a few thousand copies. But the books people talk about are the best-sellers. Take public libraries. There are 433 municipalities in Norway. Three quarters have less than ten thousand inhabitants. The average number of inhabitants per library staff person is about 2.500. Therefore most public libraries are small - with a staff of four or less.

Distributions with very many small units - combined with fewer middle sized and a few very large ones - are often called J-curves. When we deal with J-shaped distributions, we must reason with great care. Bell curves are roughly symmetric around the middle. J-curves are asymmetric, with a single tapering tail. This causes the average to be pulled away from the median. In highly skewed distributions, the median unit and its immediate neighbors are more typical - or more representative - of the statistical population as a whole than the average unit.

Typical libraries

The distribution of Norwegian libraries by population is J-shaped rather than bell-shaped. In Norway, the *median* public library has a staff of two and serves a community of about five thousand inhabitants. Municipalities close to the *average* population size are twice as big. Their libraries typically have a staff of four and serve a population of ten thousand.

If we count heads rather than municipalities, the picture changes. Half the Norwegian population lives in one of the thirty-three communities that have more than 25 thousand inhabitants. From smaller to larger, these are: *Lillehammer, Rana, Ski, Hamar, Halden, Gjøvik, Moss, Ringerike, Lørenskog, Haugesund, Ringsaker, Porsgrunn, Tønsberg, Karmøy, Arendal, Ålesund, Larvik, Sandefjord, Skedsmo, Bodø, Sarpsborg, Skien, Asker, Drammen, Sandnes, Tromsø, Fredrikstad, Kristiansand, Bærum, Stavanger, Trondheim, Bergen, Oslo.*

Norway has only five public libraries serving communities with more than 100.000 people: the four cities of Oslo, Bergen, Trondheim and Stavanger and the suburban community of Bærum, to the west of Oslo. One quarter of the Norwegian population lives in these *large* communities. Their library staffs run from about fifty to several hundred employees. A second quarter lives in *medium sized* municipalities, with populations between 25 and 100 thousand people. There are 28 public libraries in this group. These libraries typically employ from ten to forty librarians and support staff.

Staff numbers are roughly proportional with population. This means that half the librarians - and other library staff - in Norway work in communities with at least 25 thousand inhabitants. The remaining half is equally divided between *small* (less than ten thousand) and *small-to-medium* size municipalities (10-25 thousand).

There is, in other words, no typical library setting as such. We must specify the counting unit? Are we enumerating libraries - or librarians? The typical library serves five thousand people. The typical librarian works in a community with 25 thousand people. Both statements are correct. There is no contradiction - only a difference in focus.

Visitors and users

This article is not about statistical sampling, which has many pitfalls of its own. But I want to touch briefly on a sampling problem that lies close to the library-versus-librarian problem discussed above. Clarity about the counting unit is particularly important when we gather survey data. Confusing visits and users is a typical mistake. Many user studies gather data from the users that actually visit the library - for instance during a particular day or week. Let us assume that all visitors fill in a form as they leave the library. Since some people use the library frequently, while others use it seldom, these data will never constitute a representative sample of the users. Frequent users will be overrepresented and infrequent users underrepresented in the sample (see note 7 for a concrete example).

Here, the sampling unit is visits rather than users. This does not invalidate the information. Visits are important in their own right. Hotels and air lines that ask customers to fill in forms are using visits as their counting unit. Why shouldn't they? Steady customers generate a steady income. Frequent travelers are more important than occasional visitors. Libraries also need to take care of their "loyal customers". Collecting visitor data on a regular basis is a good way of spotting new trends, new opportunities and new problems. The important thing is to recognize that visitor data derive from the population of visits and not from the population of users. When we interpret such data we must have the right mental image present.

We can get data about the users as such in two ways. We can make a special survey, by mail or phone, with a sample of respondents from the local population or from the group of registered users. As a second option we can *convert visitor data to user data* by a suitable weighting procedure. To do this, we need information on the frequency distribution of library visits among the visitors. The calculations involved are not particularly difficult. But weighting the data after collection should not be done mechanically. The investigator must understand the logic of weighted averages.

International comparisons

The most common indicator of public library usage is the annual number of loans - or library transactions - per inhabitant. The Millennium study (p. 129) calls this "the best single index of public library activity". The European average lies around five. The range is surprisingly great - from 0.2 in the case of Portugal and Greece to 20.0 in the case of Finland (Millennium study, Table 7.10.). If we divide the countries (for which we have data) into three levels, we get the following ranking:

- Low (0.0 - 2.9): Portugal, Greece, Spain, Romania, Bulgaria, Austria
- Middle (3.0 - 6.9): Hungary, Ireland, Germany, **Norway**, Slovak Republic, Poland, France, Lithuania, Czech Republic,

- High (7.0-20.0): Latvia, Slovenia, Belgium, Estonia, Denmark, Iceland, UK, Sweden, Finland

In a European context, Norway belongs to the middle group. In a Nordic context, we lie at the bottom - outperformed by Denmark, Iceland, Sweden and Finland - and also by the United Kingdom. But the choice of indicator matters. We get a clearer mental picture of library activities if we factorize the original indicator. In mathematical terms, loans per inhabitant is a *ratio*: the registered number of loan transactions divided by the size of the population. This fraction can easily be written as a product of other fractions (or indicators) - for instance as follows:

$$\text{Loans/Population} = \text{Visits/Population} * \text{Loans/Visit}$$

Looking at visits, Norway is no longer a laggard. Compared to its geographical neighbors, Norway has low rates of lending. But the situation is much better if we look at library visits.

Country code	IS	DE	NL	FR	NO	SE	UK	DK	FI
Visits per inhabitant	2,6	4,0	4,3	5,0	5,0	5,4	5,5	6,3	12,8

Table 2. *Public library visits per inhabitant. Selected European countries 2002. Source: LibEcon database.*

Let us take this approach one step further. The population as a whole consists of users and non-users. When we plan library services, we need to consider these as two different target groups. The first group has already been “recruited” and can be reached at the library itself. The second must be contacted and approached in a different way. Library visitors come from the first group only. We can emphasize this by factorizing the number of visits per inhabitant:

$$\text{Visits/Population} = \text{Visits/User} * \text{Users/Population}$$

In Norway, the actual numbers (2000) are: 5.0 (visits/person) = 9.6 (visits/user) * 52 % (users). Here, a user is defined as a person who has visited the library during the last 12 months. If we combine the two factorized expressions, we get:

$$\text{Loans/Population} = \text{Loans/Visit} * \text{Visits/User} * \text{Users/Population}$$

Here, the “best single indicator” at the left of the equality sign is written as a product of three meaningful indicators to the right. Factoring provides a more detailed

picture of events. *User/Population* shows the percentage of people who actually use the library. *Visits/User* shows how often the actual users come to the library. *Loans/Visit* suggests how the library is used: mainly for borrowing or for other purposes as well. Recent survey data from Denmark indicates that half the visits concern activities *inside* the library rather than borrowing library materials (Hansen, 2005).

For practical planning these three indicators are much more valuable than *Loans/Population* as such. The first shows the potential for recruiting new customers. The second and the third describe the behavior of existing customers. A strategy for increasing the *number of visits* to the library would demand one marketing approach. A strategy for increasing the *number of loans per visit* would require another. Norwegians must find public libraries useful for other purposes than borrowing. Why would they bother to come otherwise?

Demographic analysis

Library use decreases substantially with age. In mid-life, this trend is counteracted by children who “drag” their parents with them (or vice versa). We can, however, remove this confounding effect by separating *families with children* from *couples without children* and from those who are *single* (Table 5).

Table 3 (right) shows in fact four different effects. Couples are somewhat more active library users than singles. Couples *with* children lie slightly above couples *without* children. Females are definitely more library active than males. But age is clearly the strongest influence. The visits are halved as we pass from childhood to mature adult life.

The single parent effect

After young girls, single parents are the most active library users. This calls for comment. The single parents are mostly women. They probably visit the library frequently because they have fewer alternative activities to offer their children.

If we compare *single parents* with *couples* that care for children (below seventeen), we find a difference of about twenty percentage points – which is a lot. This includes a gender effect: more than eighty percent of all single parents are women, and women between 25 and 44 are more frequent library users than men (by 15 percentage points in our case). But how important is gender as such? Let us calculate.

If we take the 15-point gender differential and apply it to couples with children, we can estimate a usage (within two-parent families) of 62 % for women and 47 % for men. When families split up, children remain with their mothers in about 80 percent of the cases. The resulting average for single parents after separation and divorce would, just because of gender, be: $62 * 80 \% + 47 * 20 \% = 59 \%$.

Life phase	Users	Visits
Young people 9-24 with parents	71	11
Girls 9-15	81	14
Boys 9-15	73	11
Women 16-24	70	14
Men 16-24	54	10
Singles 9-44	53	16
Couple 16-44 without children	50	13
Couple with children 0-6	53	12
Couple with children 7-17	55	10
Single parent	75	11
Couple 45-79 without children	43	9
Singles 45-79	38	11
All groups	54	11

Table 3. Percentage that have used public libraries in Norway during the last 12 months by life phase. Visits per user. Source: Norsk kulturbarometer 2004

The actual frequency for single parents is much higher: 75 rather than 59 %. This means that gender only contributes about 5 percentage points to the difference between couples and single parents. A 16 point gap remains. In other words: single parents use public libraries more mainly *because they are single*, not because they are female.

Weighted averages

In a demographic perspective, library use is affected by three major factors: age, gender and family situation (life phase). The age effect is strong, but it is only half the story. Those who are young today are generally better educated than older people. They have studied for twelve or fifteen or even twenty years rather than for seven or ten. The transition from industry to knowledge means that people must learn more before they start working.

Those who were born in the nineteen thirties, say, have much less education than those who were born in the sixties. The effect of age is therefore mixed with a cohort

effect. To understand the role of libraries in more detail, we must also separate age from education. This means that we must look at library visits and lending within subgroups of the population. Knowledge workers frequent libraries. Manual

Sector 2004	Primary and secondary sector*		Technicians and short HE	Service occupations w/o HE	Managers and long HE	Pupils and students
Users 2004	37%		50%	57%	56%	73%
Visits per year**	9		10	11	12	13
Sector 1988	Primary- and secondary sector + transport and communications			"Old" tertiary sector	New tertiary sector	
Occupation 1988	Farming, forestry, fishing	Industry and construction	Transport, comm.	Service and military occupations	Clerks, trade	Technical, scientific, humanistic, and artistic occupations
Users 1988	23 %	26 %	29 %	40 %	41 %	57 %
Visits per year**	4	11	13	9	13	9
HE = Higher education. *Farming, forestry, fishing, craft workers, industrial workers. **Among those who used the library at least once during the last 12 months.						

Table 4. Library use by type of occupation. Visits per year. Percent. Norway 2004 and 1988. Source: Central Bureau of Statistics.

workers do not. The most active users – after pupils and students - are people in services and people with higher education. Less than forty percent of the workers in the primary sector and in industrial occupations set their foot in a library in 2004.

In the past, however, this differential was bigger. In 1988, only one fourth of the workers in the primary sector and in “industrial” occupations visited a public library. In the traditional service sector the frequency rose to forty percent. But the most active users came from the new, knowledge based professions: a welter of technical, scientific, humanistic and artistic occupations based on higher education. In this category, sixty percent were active library users in 1988.

One dangerous trend is hidden behind the surface. We know that more and more people enter higher education. Knowledge societies depend on highly educated workers. The children of farmers and industrial workers become professionals. As the population becomes more educated, library use should, therefore, go up. In fact it stays constant. To explain the stability of use, we must find a counteracting force. The distribution of workers between sectors is changing – and should push library use up. But at the same time education-specific rates of library use seem to be declining. We have some survey data that suggest this is happening, but the whole question needs more detailed investigation.

Library logistics

Library collections are productive when they are used. Books are for reading. If we divide the size of the collection with the number of loans, we get the circulation rate. It shows how many times the average document has been used in the course of a year. In public libraries, the stock ought to circulate at least three times a year. If the normal loan period is one month, this means that the average book is in active use for three - and available on the shelves for nine - months every year.

Books that move slowly need not be available in every local library. It is enough if they are stocked at the county - or even at the national - level. With efficient interlending, slow books are still part of the library system as a whole. Finding the proper balance between local, regional and national storage is a matter of practical logistics. If we know the service level we want, we can actually use statistical models to find the optimal distribution of documents between the first, the second and the third line of supply. Commercial distribution networks do this as a matter of course.

Slow motion

In the library world, such thinking is hard to implement. Local libraries have a strong tendency to overstock. Librarians are justly proud of their interlending systems. But they do not really trust them. Instead they offer the customers shelves full of outdated books - just in case ... This occurs in many European countries (Table 5). But Norway - together with Iceland - is the greatest sinner. Our precious documents spend only nine percent of the time with the users. This means that the stock is stuck, bored and lonely, on their shelves for about ninety percent of the time.

Country code	IS	NO	SE	FR	DK	FI	DE	UK	ML	NL
Percentage time with users*	9	9	14	16	20	21	23	28	33	36
Stock/100 pop.	850	450	500	260	500	720	130	190	200	260

ML = Moore's limit. Moore proposes a circulation rate of 3 and a collection size in the range 150-250 items/100 population. *Assuming an average loan period of four weeks. Stock = books and bound periodicals.

Table 5. Public libraries 2001. Selected European countries. Circulation of stock. Stock per 100 inhabitants. Source: Millennium study, p. 127, 132.

At the same time I note that few people take such conclusions seriously. Librarians and library authorities are fully aware of the data. But they do not really care. In Norway, collection development is not on their strategic agenda. The matter is too technical for politicians - and maybe too uncomfortable for the library profession. The users do not complain. Why should we bother?

New media

The European data apply to the collection as a whole. We lack good comparative statistics for separate media types. But in Norway new media now represent 25 percent of all loans. By new media I understand both analogue and digital multimedia, including old-fashioned audio- and videotapes. At the moment, some multimedia documents are still distributed in analogue form. But digital formats are already dominating the market. Analogue formats are set to disappear.

New media are much more popular than books. In the country as a whole, five percent of the stock consists of new media. But these documents represent, as I said, one quarter of all loans. All the new media have much higher circulation rates than books (Table 6). All satisfy Moore's demand: that an active document collection should circulate at least three times per year, on the average. The contrast between old and new is glaring. The book stock, and especially the books for grown-ups, moves very slowly indeed.

Media type	Video/ DVD	CD- ROM	Audio books	Music	ML	Other media	Books for children	All media	Adult fiction	Adult non- fiction
Circ. rate	10,2	6,9	4,2	3,1	3.0	1,2	1,2	1,1	0,75	0,74
Stock	310	19	360	370	-	430	6.100	22.000	7.700	6.700

ML = Moore's limit. Moore proposes a circulation rate of at least 3.0.

Table 6. Circulation rates and total stock in thousands for books and other media. Public libraries. Norway 2003. Source: Central Bureau of Statistics.

Different readings

From a strategic point of view, we can interpret Tables 5 and 6 in several different ways. Three alternatives are:

We should be inspired by the popularity of new media - and use them as a model for our book collections as well. The rapid turnover of new media illustrates what public libraries can achieve if they are allowed to invest in new and attractive documents.

The investment in new media is a mistake and should be reduced to a minimum. The growth of new media shows that public libraries are abandoning their real mission. We should not use public funds to finance ordinary entertainment. Libraries are meant to empower people. People should learn to read on a regular basis. They should read quality materials, and they should learn from their reading.

Libraries must prepare for a future without new media. The current boom is temporary. In the near future such documents will mainly be delivered online, on demand. It is only a matter of time before broadband speeds make downloading much more convenient. Commercial publishers will not allow public libraries to provide these items for free. Libraries will in practice be restricted to materials that are distributed in physical form.

We cannot use statistical reasoning to decide between the three. Statistics provide context but not political conclusions: - *One man's ceiling is another man's floor...*

Increasing circulation

What would be the consequence of taking Moore's limit seriously as an operational goal? We can, in principle, improve circulation rates by reducing stocks or by increasing lending. In the Norwegian case, we would either have to reduce our book stocks from 21 to 7 million - or increase lending from 18 to 62 million!

The first strategy is clearly feasible. It lies within the power of the library community to remove the dead wood. Such a drastic slimming program would make the real profile of the library visible. Collections would turn lean and hungry. We know that current budgets do not allow libraries to present a collection that is reasonably up-to-date in all main areas. Adult non-fiction is the biggest problem. Strong points and gaping holes would appear side by side.

The second strategy, which would bring Norway close to Finland, is not on today's agenda. Lending can not be tripled, from five to fifteen loans per capita, without a vast program of investment and massive political support. We have supposed that the book collection would remain constant in size. But most of today's stock would still have to go. Millions of items have to be scrapped - and replaced by attractive new volumes.

Books and reading

On an average day, the average Norwegian spends 12 minutes on book reading - for leisure (*Norsk mediebarometer 2004*). In addition, he or she spends 11 minutes on periodicals - and 30 minutes on newspapers (8). Let us explore these statistics in more detail. The mental image of people who open a book, read for twelve minutes and put it back on the shelf is false. The average value is not typical. In this case, as in many others, the population must be divided into sub-groups. If we distinguish users from non-users, our conceptual understanding of the statistical information becomes much clearer.

On an average day, more than three quarters (77 %) of the people in the survey had not read a book at all. The book reading time derives from the 23 percent that had opened a book on that particular day. And these people spent, on the average, almost an hour (52 minutes) reading. This number - about an hour - is typical. The Norwegians that do read tend to spend about an hour whenever they start reading. Keeping this pattern in mind, we get a good picture of the amount of reading by looking at the number of readers in different social categories.

Women read more books than men. This is true in general, and also for every age group. The difference is greatest among young people (9-24 years). Does this mean that boys read less than girls? Should librarians make an extra effort to motivate boys to read? That is not automatically the case. Reading takes many forms. Norwegian media statistics single out five categories: books, comics, magazines, journals and newspapers. Girls spend more time on books and magazines than boys. Boys prefer comics.

If we add up all five, girls between 9 and 15 spend on the average 28, while boys spend 25 minutes reading. When *all print channels* are counted, girls and boys spend almost the same amount of time on reading. The strategic conclusion seems to be: if you want boys to read more - buy comics.

Transparent organizations

The public sector is under scrutiny. In the past, public service was often associated with low efficiency. Public institutions were monopolies, protected from the market and its demanding customers. People could not shift their custom from one local authority to a better one - just across the street. Incentives for innovation and change were weak. Public jobs might be poorly paid, but they were normally safe for life.

Today, European governments want public services to become much more agile. The growing productivity of private enterprise puts pressure on public services. Safe and dull organizations should become flexible, transparent, competitive and accountable. If private firms can increase their efficiency - producing more with less - public service providers should be able to do the same.

Imposing change on established institutions is never easy. Change implies additional work, since new plans must be developed, debated and implemented. It requires additional learning: old book horses must learn new digital tricks. It promotes uncertainty and fear: Will my job disappear? Will my skills be respected? Can I master the new technology? Change is seldom popular on the shop floor. Here, the *Don't Rock the Boat Party* can usually outvote the *Party of Rapid Transformation* by a good margin.

But we have little choice. Those who only fight rearguard actions end up in the rear. As a statistician I believe in a forward approach: embracing rather than rejecting statistics. To make themselves heard, libraries need to learn the concepts, the models and the language of statistics. Words and numbers are both tools. We need them in our efforts to describe, to understand, to manage and to change the social institution we call libraries – as well as the larger social institution we call society. With that in mind, we propose a set of guidelines for libraries that want to *use* statistics.

Fifteen strategic guidelines

Library users

1. Count visits as well as loans. Emphasize the number of people who actually visit the library. In Norway, the number of visitors is high. Much goes on inside public libraries that is not visible from the number of loans.
2. Keep your target group in mind. Distinguish clearly between users and non-users of libraries. Mental images are important. Libraries do not serve the general public. Ordinary library services are – almost by definition – directed towards regular users.
3. In Norway, about half the population can be considered library users. The typical user visits the library about ten times a year – and borrows about ten books (or other items) every year.
4. Avoid annual assessment. Look for long-term changes. Important library trends only become clear after some years. Study demand patterns – lending by medium and genre – over five or ten years.
5. Know your customers. There are great differences in lending and other forms of library use between children, youth, adults and seniors; between women and men; and between people in different professions.

Library collections

6. Focus on accessions. Collections need renewal. High renewal rates contribute to quality, variety and actuality - which are official Norwegian policy goals. Accessions can be measured in two ways: by the number of new items and by the budget for purchases.

7. In Norway, close to fifty percent of all new library books are now financed by the Norwegian Cultural Council. These books are selected centrally. The purpose is to stimulate publishing in Norwegian. The effective demand for these books is highly uneven. Only books in real demand contribute to renewal in a meaningful sense.
8. Reduce collections. Norwegian library collections are far too large – mainly because dated books remain on the shelves. This is the case in many other countries as well. In the years ahead, professional collection development will require a substantial reduction in the size of our collections.
9. The active stock – the books available on open shelves for browsing and lending – should generally be reduced to one third of total lending. Books in normal demand should, in other words, circulate at least three times a year. In Norway, more than fifty percent of current public library collections are effectively worthless.

Library services

10. Libraries have low visibility. Develop a clear picture of how much time people spend inside your library. The more hours they spend, the more satisfied they are. They vote with their feet. Count the shoes – and tell your local politicians.
11. Decision makers need mental pictures of library services that go beyond basic lending. It is not very hard to document what people do inside libraries. Simple observation methods can be used to collect convincing data.
12. Library staff spends much time guiding and advising customers. This work will be more visible and appreciated if libraries could develop decent reference statistics.
13. Libraries provide many services for groups of users: school class visits, book presentations, fairy tale readings, exhibitions, user instruction, lectures, concerts, etc. Take care to document them well – with quantitative and narrative data.
14. Libraries often cooperate with schools, nursing homes, and other community institutions. The national program “Boka kommer” [The Book comes to You] and other forms of outreach activities also belong here. Document these as well – they are part of the social networks that create a durable civic society.
15. An increasing share of library resources are now being channeled into web-based services. We have an urgent need for meaningful virtual statistics.

Library authorities still spend too much effort on repetitive data collection and too little on data analysis. In this paper we have argued for a broader use of official library statistics in library management and strategic planning. We have showed how new statistical indicators - in the form of simple ratios – can be constructed. And we have suggested how such indicators can be used for effective strategic planning. Simplistic decision making based on one or two indicators can be opposed on statistical grounds – by offering a wider range of tools and better ways of using them.

Notes

1. Library students are covered by DBH, the national database of higher education statistics. URL= <http://dbh.nsd.uib.no/dbhvev/>. Read: October 24, 2005.
2. Statistics on professional publications in LIS are included in FRIDA, the national database of research results from universities and colleges. URL= <http://wo.uio.no/as/WebObjects/frida.woa?inst=215>. Read: October 24, 2005.
3. Information on StudData at URL= http://www.hio.no/enheter/senter_for_profesjonsstudier_sps/studdata. Read: October 24, 2005.
4. See the official classification scheme at URL= <http://www.ssb.no/emner/06/yrke/>. Read: October 24, 2005.
5. Library statistics 2004 at URL= <http://www.ssb.no/emner/07/01/40/ffbibl/tab-2005-06-01-01.html>. Read: October 24, 2005.
6. Their association is found at URL= <http://biblioteknett.no/smaabib/>. Read: October 24, 2005.
7. The library of Bolton (UK) conducted a user survey in 1994. “Customers were sampled during each hour of opening during the two weeks from 16th to 28th May. ... The sample [2.415] was large enough to ensure that the overall results of the survey should provide a valid picture of our users and their views. ... Perhaps one of the most surprising results of the survey was the very frequent use of the library by most of those surveyed”. England and Sumsion (1995): p. 162-164

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Summary

In modern knowledge based societies public institutions are increasingly exposed to economic scrutiny. They must document the efficiency and the value of their work. Public libraries are no exception. In Norway, the Central Bureau of Statistics has introduced a sophisticated system for collecting and comparing municipal statistics. In the past, nobody outside the library world showed much interest in library statistics. Now they are studied closely by decision makers.

Librarians need to master a discourse based on statistics. In this paper we explore some central issues in statistical reasoning – counting, distribution curves, indicators, correlations – in the library setting, with Norway as the main case. We also look at Norway in a European context and draw some new conclusions about the actual state of affairs. The article concludes with a set of recommendations for libraries that want to document their activities with a maximum of relevance and political impact.

Cyberspace and market place: library messages beyond the border

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“If we add value, and yet are undervalued; and if the stereotyped image of the traditional library is far removed from the reality of the modern hybrid library and information services—then, clearly we have a marketing issue to address.”
Bob McKee.¹

I. Introduction and Environmental Scan

Any profession whose primary business is information is experiencing a decline of preeminence in the Web environment. Journalism is one such profession with journalists often pondering whether they should write their own obituaries.² Librarianship is another profession whose *raison d'être* is information. Like journalists, whose influence over their monopoly on traditional news has declined, the librarian's role as the sole provider of information has diminished since widespread use of the Internet. The influence of librarians on users' information seeking habits has been severely challenged with the appearance of popular search engines such as Google, now used in everyday life. For the Net generation of students and library users, doing research means going online. Indeed, a 2002 Pew study

revealed that 73% percent of U.S. college students use the Internet more frequently than libraries for research purposes.³ This is, indeed, challenging news for academic librarians.

The adage that the library is the “heart of the university” has been rephrased by some as either the “electronic hub” or the “circulatory system.” These phrases reflect the changed nature of how and where information is created and stored, its distribution and dissemination routes, and access. Simultaneously, the importance of the classroom as the sole place of learning has also been challenged. Any place (and any time) where (when) students have access to the Internet is now a source of information, including even the lecture notes of professors and course reading materials. In a wireless digital environment significant learning activities take place where students are and assemble: in hallways, in cafeterias, in dormitories, in student centers, and in computer centers.

The image of the university as an ivory tower is slowly giving way to that of a ravenous shark competing for profit in the market place of ideas. While universities in the past monopolized teaching, learning and research, these core missions have become mechanisms for profit maximization. This is especially true for some online institutions, which have taken full advantage of the rapid development of information technology and communication. In other areas, universities now spend large portions of their financial resources to compete for new students, most especially from non-traditional population groups. Academic institutions have also established major fund raising arms and alumni relations offices; senior academic officers such as vice presidents often head these offices. Despite cautionary warnings by Derek Bok, the former president of Harvard University, about the seductive power of commercializing university research,⁴ modern universities have engaged in marketing as a necessity. Much as a soap company attempts to sell a brand of new soap with a different fragrance, universities have developed staff and skills to advertise their educational programs and services using mass media.

University libraries have always mirrored the images and practices of their parent institutions. As will be discussed in this paper, although academic librarians were initially reluctant to incorporate marketing as an accepted practice, there is growing evidence that this is a fast growing area in librarianship.

II. Academic Libraries and Marketing

The term “marketing” in a library context has been a source of confusion and ambiguity. Gupta and Jembhaker elaborate the multiple meanings of the term for librarians and information professionals.⁵ This multiplicity can be likened to the famous tale of the blind men and the elephant where each felt different parts of the elephant

but not the whole and each gave a different description of what the whole must be. Just as in this example, there has been no agreed upon meaning regarding what constitutes marketing for libraries.

As demonstrated in recent surveys by the Association of Research Libraries, (ARL) the term marketing for academic libraries has multiple meanings covering a wide range of activities. The 1999 ARL survey on marketing and public relations assessed the extent and nature of marketing activities by North American research university libraries. This survey revealed that the terms “marketing”, “public relations” and “development” are used interchangeably in most academic libraries; the trend is to establish separate offices for these activities with marketing efforts closely tied to fund raising activities.⁶

In 2004 the ARL conducted another survey entitled *Library Services in Non-Library Spaces*. This survey does not use the term “marketing” to describe these activities. Instead, the report points out that there is no consistent name for library services in non-library spaces, and this lack of a standard nomenclature reflects the entrepreneurial, ad-hoc nature of many of these out-of-library services.⁷

The discussions on library marketing concepts and practices appear in many books and journal articles. Notable among them in recent years are the works by Darlene Weingand (1999), Rejean Savard (2000), Eileen Elliott de Saez. (2002), Dinesh Gupta and Ashok Jambhekhar (2003) and by Jeannette Woodward (2005).⁸ As noted above some major surveys regarding marketing activities were also conducted by the ARL and by Shontz and Parker for public librarians.⁹ Thanks to the work of IFLA and its Section on Management and Marketing, an important international platform for library marketing has also been provided. Papers presented at IFLA conferences have for many years provided valuable information on library marketing experiences and practices worldwide

This literature often points out two consistent themes. One is the librarians’ failure to market themselves and two is librarians’ hesitance in accepting marketing as part of their essential activities. Some have faulted libraries for marketing beautiful buildings and dusty books at the expense of the other valuable services that librarians provide. Indeed, too often librarians fade into the background¹⁰ rather than being identified as a “keystone species” that gives unique shape and strength to the library information environment.¹¹ As Nardi and O’Day affirm in their study, although librarians have a flourishing information consulting practice, not enough people know about it.¹²

The literature also indicates that librarians carry an almost legendary reputation for feeling uncomfortable with the term “marketing” with its traditional association with “advertising,” “public relations,” and “commercialization.” Librarians, however, are not alone in their aversion to the term. Museums, one of the institutions

that shares common ground with libraries, have the same reluctance. A recent Washington Post article reports about the Smithsonian's marketing drive as follows:

"This focus on business doesn't sit well with all of the Smithsonian's huge scholarly staff.... They say the emphasis on enterprise is at odds with the Smithsonian's culture of collecting and preserving the nation's stories and accomplishments. Branding – putting the Smithsonian's name on items – to them is more akin to marketing J.Lo's perfume than preserving a dinosaur.¹³

Compared to their colleagues in public libraries academic librarians are rather latecomers in actively engaging in marketing activities. However, as numerous studies indicate, now that today's college students gain access to research information by going online instead of going to campus libraries, academic librarians are experiencing a rude awakening.

In fact, since the early 1970s academic librarians have experienced immense success in marketing (and integrating) library instructional programs into academic courses. However, because the fundamental mission of university libraries is to support and underscore traditional academic and research activities, the non-academic units of the university seldom market library services. This paper highlights marketing initiatives practiced at the Rutgers New Brunswick campus utilizing non-academic units as tools for marketing library services. Our goal was to deliver library messages to students where they congregate in non-library places.

III. Examples of Marketing Practices at the Rutgers New Brunswick/Piscataway Campus Libraries

Eileen De Saez suggests that marketing does not necessarily involve major structural alterations in an organization but does require the use of imagination.¹⁴ Schontz et. al. simply notes that marketing is nothing more than satisfying the needs of a customer.¹⁵ These are the two underpinning philosophies that drove the activities described in this section. As mentioned earlier, marketing in academic libraries means many things from the simple activity of creating an information brochure to major fund raising campaigns. For the purposes of this paper, marketing is defined as activities that are deliberately structured in order to make library information available in non-library places.

Rutgers University Libraries is composed of 26 libraries and centers, including one virtual library (RU-Online) whose resources over the past few years are among the fastest growing in the system. The physical libraries are geographically dispersed across New Jersey on campuses in New Brunswick/Piscataway, Newark and Camden. In 2004 the libraries had holdings of almost three and half million volumes, serving a community of more than 42,500 full time students of which almost 6,000 are graduate students, and over 2600 are faculty members. The New Brunswick/

Piscataway campus is the main campus of this system hosting about 25,000 full time undergraduate students; these were the main audience for the marketing activities described here.¹⁶

At Rutgers, some marketing activities are organized at a system wide level, some at the campus level and some at the level of individual buildings. On a system wide level a communication's audit was conducted in 2004 on three campuses scattered around the State in four cities. This was a strategic audit that aimed to "evaluate the current communication program (internal and external) and provide directions for enhancing its effectiveness."¹⁷ In other words, this audit was to identify how Rutgers can best grow and become stronger. External consultants were hired to meet with different constituencies who were composed of librarians, staff, faculty, students, and university administrators. This was, in essence, what is frequently termed a "marketing audit" that attempts to identify strengths, weakness, opportunities and threats (SWOT analysis).¹⁸

However, prior to this system wide audit, several marketing initiatives took place from 2003 through 2004 on the campus level on the New Brunswick/Piscataway campuses. We present five representative examples of these marketing activities in this paper.

The New Brunswick Libraries (NBL) is a library system within the Rutgers University Libraries (RUL) composed of four major libraries housed in four separate buildings and ten departmental libraries and centers located on five campuses across two municipalities in central New Jersey. New Brunswick librarians are keenly aware of the changes that have taken place in user habits and in the expectations that users have of library resources and services at Rutgers. Among the three functional teams at NBL it is the Information Services/Steering Group that led the discussions about the marketing library website and that took the initiative by creating outpost services as well as outreach programs.

No New Brunswick campus user surveys were carried out for the purposes of marketing although smaller and informal surveys by individual libraries and librarians were conducted. Instead, large-scale studies that were conducted on a national level that revealed how college students in general use libraries and the Internet were employed as the basis for planning and discussion. One such analysis was a 2002 OCLC study which revealed how college students use the Web for research. Another undertaken by Outsell, Inc. on behalf of the Council on Library and Information Resources and the Digital Library Federation surveyed the students' use of libraries and the Internet. Additionally, a Pew Internet Life study entitled *the Internet Goes to College* reported that 73 percent of college students use the Internet more than libraries for their research; only 9 percent claimed to use the library more often.¹⁹

Rutgers New Brunswick librarians have been very successful integrating library instructions into course work. Moreover, in recent years, we have been able to coordinate the delivery of library instructions to lower level courses, those with multiple sections, with scripts of lesson plans and with web tutorials. Such courses use part time lecturers and teaching assistants for library sessions to meet the rising demand for library instruction.

In addition to these successful class room instructional programs the marketing efforts were designed to provide reference services and to disseminate library information (such as the library Web address), outside the classroom and outside the library. Such services were often referred to as “outpost services.” The main objectives were to facilitate remote access, provide pin numbers, and answer reference questions, among others. In order to achieve these goals, librarians worked with the office of the Dean, specifically the Rutgers College Dean, the Office of the Campus Center Director, and the Office of Parking and Campus Bus Operations.

A. Librarians without Borders

One of our better-publicized and earliest marketing endeavors was entitled “Librarians without Borders.” This was the first time that the libraries partnered with the Office of the Campus Center Director. One of the authors (Wilson) as Chair of the aforementioned Information Services Steering Group contacted the Dean of Rutgers College who then referred her to the Campus Center Director in order to secure a visible and viable spot in the enormous campus center building. After the initial meeting with the Director of the Campus Center and the Associate Dean of Rutgers College, three librarians were appointed to form the Outpost Services Team. The team was tasked to plan, implement and evaluate the effectiveness of reference services provided at the Campus Center where students gather for food, study, social networking, meeting, relaxation and study. The activities and assessments of this experimental project are described in detail by the participating librarians in the summer 2003 issue of the *Reference & User Services Quarterly* under the same title *Librarians without Borders*.²⁰

B. Your Libraries @ Campus Center

In their detailed description of the *Librarians without Borders* project, our colleagues reported that during the experimental period, despite the occasional high visibility of libraries and librarians at the Campus Center outpost for reference services, there was not an overwhelming number of reference questions. They reported that this low number of reference questions clearly did not justify the costs of permanently staffing the outpost facilities with librarians mainly for reference service purposes.²¹

In the fall, 2004, however, the Rutgers *Ask A Librarian 24/7* email reference service was inundated with questions from students who were requesting their PINs online in order to gain remote access to the libraries' licensed databases. Our Access Services staff, either in person or via the *Ask A Librarian* service, normally issues the PIN numbers. Therefore, instead of replicating reference service outpost services where relatively few reference questions were asked, it was agreed by the Head of Access Services and the Chair of the Information Services Steering Group to jointly establish library outreach service stations for a two week period from September 20 through October 4, 2004. These stations were placed at the two largest campus centers under a banner that read "Your Libraries @ Campus Center." The particular period was chosen to capture the attention of freshmen and transfer students who were new to campus and who were unfamiliar with the Rutgers libraries system. This project was an effort to be proactive by offering library information in a non-library environment in order to promote our virtual and physical library collections and services.

A Personal Identification Number (PIN) is required for all electronic transactions with libraries (for example, to renew books, to request a book delivery service, etc). At the time, a PIN was also required in order to gain access to our commercial databases from remote sites. Many students in frustration ask for their PIN at the last moment. We wanted to be proactive and offer PIN and other services at the busy Campus Centers.

Unlike the *Librarians without Borders* project, providing reference services was not the main objective of this project. The two service stations were designed to raise the visibility of the libraries by distributing promotional materials, and by offering PINs to those who did not have one, among other services. Therefore, while reference librarians were asked to volunteer their time, these service stations were largely organized and staffed by Access Services staff members.

Not surprisingly, Access service related questions (interlibrary loan, circulation, etc) were the highest (168). Almost as high (138) were general questions regarding campus directions (these questions have nothing to do with library services); 78 library users were issued PINs and 31 reference questions were answered. During this time almost 1700 library informational brochures and promotional items (such as "post it" packets with the library logo and library web address) were distributed.

Putting this data in the context of current existing information services sheds some light regarding the preferences of Rutgers library users. Table 1 presents the number of questions by type at three different service stations—two physical and one virtual. Table 2 is a graphic presentation showing the percentage distribution of the types of questions that were asked. Table 3 is a graphic representation of Table 1 illustrating the types of questions that were answered in person and

by phone at one of the largest libraries in the Rutgers system (the Alexander Library reference desk), via the Rutgers Ask A Librarian 24 /7 email reference service, and at the Your Libraries @ Campus Center locations during the period from September 20 through October 4.²²

	Campus Centers	Ask a Librarian	Alexander
1. Reference questions	31	68	739
2. Access questions	168	64	
3. PIN requests	78	481 (online form)	Not available ²³
4. Directional questions	138	3	546
Total:	415	616	1285

Table 1. Number of questions by type at library public service stations (September 20 through October 4, 2004)

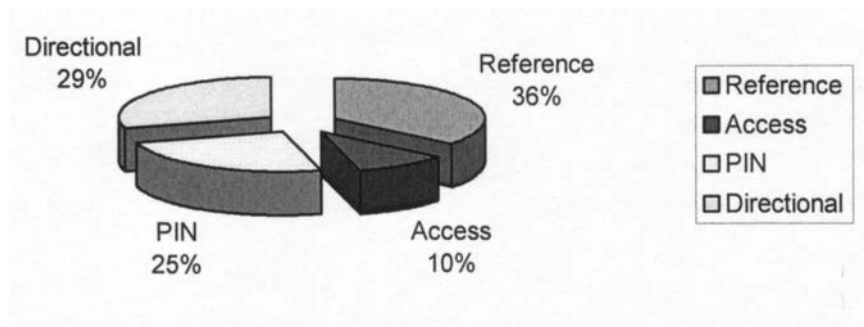


Table 2. Number of questions by type.

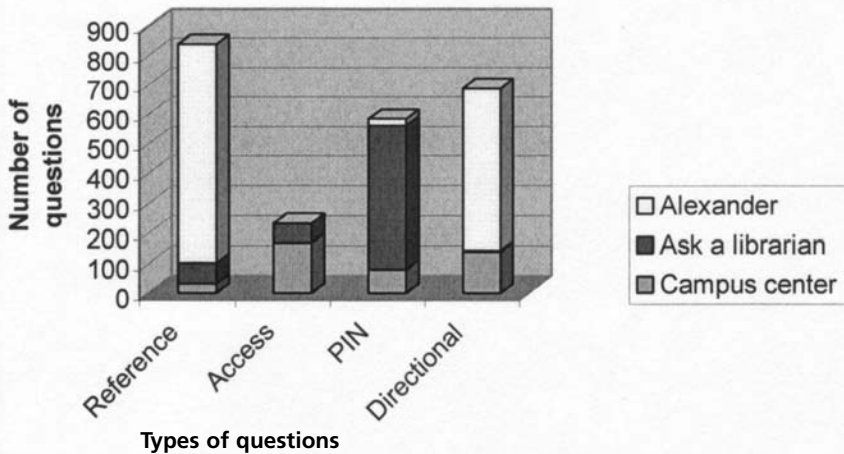


Table 2. Various Questions Being Asked at Library Public Service Stations (Sept. 20 through Oct. 4, 2004)

These data²⁴ clearly indicate that students (and other library users) identify the library’s physical reference desk as the primary place to seek assistance for research, compared to virtual or non-library place reference services. They also suggest that almost 88 % of the reference questions were answered in person and by phone at the Alexander Library—this number would only increase if all the Rutgers reference desks were added. These data also confirm our colleagues’ earlier findings that students do not bring large numbers of reference questions to the Campus Centers.²⁵ Students and faculty also clearly demonstrated their preference for using online forms and virtual reference services when asking factual and personal questions regarding library collections and services, (for example, obtaining a PIN, borrowing, the status of interlibrary loan requests, etc) While the library service stations at the Campus Centers were not the primary locations that students used for library assistance, the data clearly suggest that they provided a significant supplemental service to the traditional reference desk and Ask A Librarian services. Determining the place and the time of library service in non-library places that will have the highest impact on student learning is clearly an important marketing agenda for academic librarians.

C. “Lost in Cyberspace? Try Your Library Space at [www. Libraries. Rutgers. Edu](http://www.libraries.rutgers.edu)”: Campus Bus Advertising

When we were organizing “Your Libraries @ Campus Center” project in the fall, 2004, we also contacted the office of the Director of University Parking and Transportation Services. As described earlier, Rutgers New Brunswick/Piscataway campuses span over two municipalities divided by a river. The university operates one of the largest transportation systems in the State. The inter-campus bus system transports an average of 40,000 students daily among the five major campuses.

What librarians learned at our first meeting with the Assistant Dean of the Campus Bus Operations was that we were actually late comers in expressing an interest in using the campus bus system as a medium for advertising. For example, a local campus restaurant such as Wendy’s even offered a hefty sum of money to advertise their restaurant on all campus buses, as did many others. However, because of limited space, the Campus Bus Operations rejected all advertising requests except for posting their own messages and class schedules for the semester. The Acting Director of the New Brunswick Libraries and the Chair of the Information Services Group were able to convince the Campus Bus Operations that if they posted library messages, they were indeed participating in helping students succeed in their academic endeavors, thus adding to the value of their transportation service. The libraries then obtained permission (gratis) to post two messages. “Google not Good Enough? Visit the Libraries Website at www.libraries.rutgers.edu” and “Lost in Cyberspace? Visit Your Libraries Website at www.libraries.rutgers.edu.” Due to concerns regarding a possible trademark infringement of Google, we decided not to post the Google message. The process of creating and selecting these messages involved staff, librarians and students.

We were not able to collect systematic data from this initial year regarding how effective the message was, what percentage of students were cognizant of it, and how it impacted students’ use of the libraries. A very informal show of hands in library instructional classes indicated that only a small number of students saw the posting. One problem was that the poster was of relatively small size and was posted on a long double bus. Clearly much needs to be improved in delivering the library message via the inter-campus bus system as well as the effectiveness of the design. Nevertheless, we have made significant inroads in attempting to provide students with library messages in a non-library setting.

D. Making library public workstations show images with a large distinct library logo

Creating student awareness of libraries also meant creating a clear and consistent message that students would pay attention to, comprehend, retain and act upon.

This marketing principle prompted the librarians to make our messages consistent throughout the campuses.

The campus bus advertising message, described in the previous section, prominently displays the university library logo,” RUL.” In order to help students make the connection between the campus bus message and the computer workstations in the libraries, we requested the Library Systems Office to redesign the screens of all public workstations to prominently display the library logo along with a choice of Internet browsers. Prior to these marketing efforts, the public workstation screens did not display the library logo. Instead, the screens displayed a collection of small icons including the Internet browsers. Most users clicked on those browsers that are defaulted to the library’s homepage. However, unsophisticated users, including our own students, frequently approached the reference desk in search of library catalogs rather than clicking an Internet browser. We then realized that nowhere on the screens of all library workstations were there instructions on how to begin library searches. In other words, for many users our screen display was counterintuitive. The re-imaged screens now clearly indicate that the workstation is a gateway to Rutgers University Libraries resources and services.

E. Library Information Brochures Displayed at the Campus Centers

Librarians have traditionally displayed informational materials about the libraries in the libraries themselves. The assumption is that additional information is available only to those who personally visit the library—how to use it and what services are available and what “treasures” are hidden in the collection. Even in the Web environment, where we know that fewer people come into the library, we still kept information brochures in the library, even the one that instructs users how to connect from home. In our recent attempts to create library awareness and reach our user community, both physically and virtually, we have deliberately placed the library information brochures at the Campus Centers along with other brochures about health, food, extra curricular activities and other attractive campus events.

IV. Conclusion: From “Constitutive Choices” to “Marketing Epidemic”

In this paper we have reviewed how the environment of information providers at academic institutions has changed. We particularly noted how the use patterns of libraries by the Net generation of students has been transformed by their clearly defined preference for accessing libraries online from their site of convenience. As our late professional colleague, Ann Lipow, suggested in an earlier paper, in the Web environment we need to begin to think who is remote – are we remote librarians or are our students remote users? ²⁶ Only when we start asking this question from our students’ perspective can we begin to create, develop and

structure activities that will influence the ways that students do research. Most of all, such activities will improve the quality of library learning and research and reduce the probability of students being lost in cyberspace.

The marketing initiatives described in this paper are only a few that were experimented with at the Rutgers New Brunswick/Piscataway campuses. Many of these practices were “bottom-up” initiatives that were planned and implemented by librarians and staff who met to search for alternate information services models.

A successful marketing strategy requires temporary realignment of internal organizational structures such as combining Access and Information services for a specific task. Simultaneously, librarians need to forge working relationships with other university offices, particularly with non-academic units whose objective is to enhance the general quality of student life. An organizational culture that encourages looking outward in search of partnerships with non-academic units is an essential element in successfully delivering our message to a wider audience.

In social science terms, librarians need to make “constitutive choices” which sociologist Paul Starr defines as “those that create the material and institutional framework of fields of human activity.”²⁷ It implies the establishment of conditions that set the path for an institution’s future direction. Many academic libraries have indeed begun to construct just such a framework for marketing activities. At Rutgers deliberate choices are being framed by a system-wide marketing committee to address marketing issues both in training and in practice.

Malcolm Gladwell, the popular author of *The Tipping point: how little things can make big difference* and recently *Blink: the power of thinking without thinking*, suggests that “libraries must consider how to frame the way libraries are viewed – what associations come to mind when people think about libraries? Is the library viewed as a safe haven, a literary adventure? Or a technology hub? Whatever the framing may be, it is the first critical step in starting an advocacy epidemic.”²⁸ Bob McKee also warned about the emergence of a dangerous divide between our profession’s perception of libraries and the public’s perception.²⁹

To paraphrase Gladwell and McKee, we can ask ourselves how the Net and, now, the Gamer generation, views libraries – as study halls, meeting places, library cafeteria (at least this is what students expressed great interest in having in the future), computer centers or hot zones? The first step is to learn student’s perceptions of today’s libraries and to offer them a product that other search engines cannot. This, of course, is a tall order and difficult to do. However, the value and potential of libraries as places to learn, where your “ultimate local search engine” can be found in the form of your local librarian, must be marketed vigorously. Whatever the framing may be, it is the first critical step in starting a long term and sustained marketing epidemic.

The current marketing challenge for academic librarians is to understand the elusive ways that the Net generation of students and faculty use digital and print libraries. Librarians are urged to reframe how the unique strength and advantages of libraries and librarians are marketed. Our challenge is to convince our users that libraries and librarians can deliver access to information with greater economy of effort than at any other time.

The Internet provides everyone with fertile ground for research. It particularly provides rich sources of research data collected by national organizations and others. Librarians as information professionals must take advantage of the availability of these data. They must analyze the information/research habits of users and deliver a library product that will be compatible with them. Through the focus group interviews, the electronic survey questionnaires, and the communication audit, Rutgers in recent years has amassed data about how faculty and students view and use libraries. Such information clearly helps define future marketing strategies.

Notes

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 21. Kuchi, et. al. p.317
 22. The hours of staffing of these service stations varied. The Alexander Library reference desk was staffed from 9am through 9pm Mondays through Thurs-

days, 9- 5pm on Fridays, 1-5pm on Saturdays and 12-7pm on Sundays. The two @Campus Center service stations were originally planned to staff from 11am through 8pm Mondays through Thursdays and 5-9pm on Sundays. However, due to staff shortage and slow activities, not all hours were staffed as originally planned during this two week period. Ask A Librarian is a 24/7 Rutgers email virtual reference service.

23. The Alexander Library reference desk does not record access questions as a separate category. Most access questions (particularly the requests for PINs) would have been considered as directional unless the question required a response of reference assistance—such as verification of an ILL citation.
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Abstract

The concept of “marketing” or “public relations” is still an underdeveloped (indeed, perhaps unrecognized) area in academic librarianship. In order to advertise library resources and to teach library research skills, academic librarians have been increasingly successful in building partnerships with academic units and course instructors. Building partnerships with non-academic units has not, however, been frequently explored.

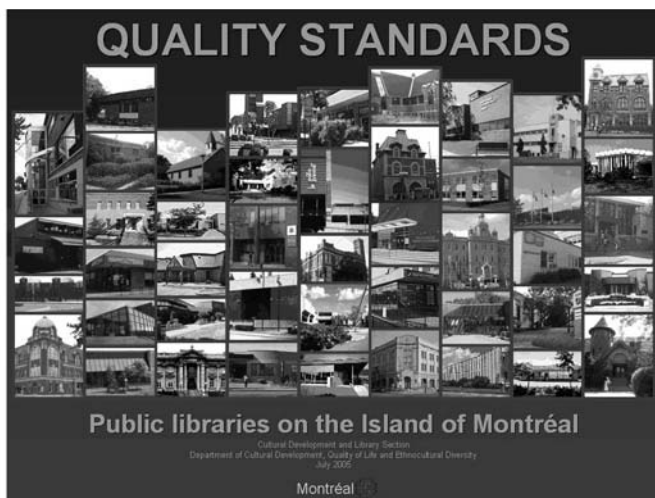
This paper examines library collaborations with campus partners who are not directly involved in student academic activities yet who have an enormous impact on the quality of student life and on factors that influence academic success. The paper explores the concept of physical and virtual library outposts, of using campus physical spaces, such as campus centers and campus buses (which are not normally considered to be part of student intellectual life) to inform students about library resources. How these concepts were applied in developing campus outreach programs is a central focus. The paper presents five representative campus outreach programs that used non-academic units as the venue for marketing. Partial findings of the effectiveness of such programs are also presented.

Quality Standards: Public libraries on the island of Montreal

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Development of Québec public libraries: Profile of the standardization process
Before describing the project of conceptualization of a new standardization process now underway at the new public library system of Montreal, it is important to dress the principal stages of the development of Quebec public libraries. First of all, we should point out that the Quebec public library network is the responsibility of municipalities. The libraries of small municipalities, villages or parishes with popu-



lations of 5,000 or fewer inhabitants are served by a network of Public Library Regional Service Centres (*Centres régionaux de services aux bibliothèques publiques, CRSBP*), non-profit private corporations that are financed largely by means of subsidies paid by the Ministry of Culture and Communications of Quebec. These regional organizations will be concerned by supplying and cataloguing of documents for these small libraries. Besides, a great majority of the 165 public libraries localized in the largest municipalities (serving 5,000 or more residents), are managed by their municipal administration by virtue of their municipality's charter. The Ministry of Culture and Communications sets up different grant programs to support the development of library networks.

In the late 70's and early 80's, the Government of Quebec began a major development plan for public libraries by including grant programs targeting municipalities. At the same time, operating standards were proposed. These would be the subject of major revision in 1996, under the responsibility of three associations of the Quebec documentary sector (*Association pour l'avancement des sciences et techniques de la documentation (ASTED)*, *Les Bibliothèques publiques du Québec (group of Directors of Quebec public libraries)* and *Regroupement des CRSBP*)¹ These standards concern resources only and most of these resource indicators are established according to the population served.

In 1985 and 1986 we experienced major cuts in provincial government funding and an inquiry committee was then created (*Commission on public libraries — the Sauvageau Committee*). Following this Committee's findings, new rules of grant allocation were established. Subsequent to revision of the parameters of the annual survey of statistical data in 1992 and revision of the standards guidelines, *Pour des bibliothèques québécoises de qualité: guide à l'intention des bibliothèques publiques*, in 1996, (joint project by the three associations: *Association pour l'avancement des sciences et techniques de la documentation (ASTED)*, *Les Bibliothèques publiques du Québec* and *Regroupement des CRSBP*, the following year the Government proceeded with consultations on the future of public libraries. These hearings enabled the Ministry of Culture and Communications of Quebec to implement, in 1998, a three-year public reading program. As government interventions centred only on enriching book inventories, they obtained rather mitigated results and did little to improve the quality of the documentary services. Finally, over the last two years, the Government of Quebec introduced some important modifications concerning the grants distribution program. Concerning the standards guideline, this one is under revision process now with the coordination from ASTED and will be probably completed in 2006.

Consequently, according to the statistical and financial data published in annual reports from ministries of the provinces of the Alberta, British Columbia,

Ontario and Quebec in charge of programs to public libraries, we have to recognize that the public libraries of Quebec suffer from chronic underfunding compared with the libraries of the other Canadian provinces. For example, in 2001, the public libraries of Quebec spent 30.1% less money per capita (or \$27.35 CAN / inhabitants) compared with an average spending of \$35.58 CAN by the libraries of three other large Canadian provinces: Alberta, British Columbia and Ontario. This underfunding has the effect of considerably reducing inventory renewal; public libraries in Quebec have 2.58 books per capita compared with 3.02 in the three other provinces, a deficit of 17.1%. It is especially at the level of personnel that we find a more substantial deficit, in Québec there is 0.63 FTE per 2,000 inhabitants compared with 1.04 in the other three provinces (a deficit of 65.7%). Finally, overall library use is far less with just 5.9 loans per capita compared with 10.12 in these provinces (a deficit of 71.5%).

Concerning Public libraries on Montreal Island, these ones spent, in 2002, 11.8% less money per capita (or \$38,3 CAN / inhabitants) compared with an average spending of \$43.4 CAN by 7 Largest and Urban Canadian Library Systems serving 500,000 inhabitants and more. Again, this underfunding has the effect to create an important deficit in term of staffing: 0.52 librarians per 6,000 inhabitants compared with 0.76 in other Canadian Large and Urban Libraries (a deficit of 31.6%) and 0.95 employees per 2,000 inhabitants compared with 1.24 in the same Large public libraries in other provinces (a deficit of 23.4%). So, it is not a surprise to have a large disparity in terms of loans per capita (6.5 at Montreal compared to 12 in other 7 comparable largest Canadian public libraries – a deficit of 45.8%).

Finally, the merging of municipalities in January 2002 and the opening, in 2005, of the Grande bibliothèque du Québec, have had and will have, major impacts on the development of the Quebec public libraries and more specifically at Montreal.

Description of the new public library system of Montreal

Statistics for 2002, following the merger of 28 municipalities on the Island of Montreal, show that the new library system welcomes a little less than 6 million visitors (entries) and makes about 12 million loans. In addition, this network, which has more than 900 employees (924.4 FTE) in some 60 buildings (the library system of the former city of Montreal had only 26 branches), preserves, manages, develops and promotes a stock of several million documents. A Bookmobile as well as mail and drop-off services for the elderly add to this service offering. Including centralised services (Main library (adults and children sectors) and Sound-recording unit), there are about 4.9 million printed monographs (that is 2.68



New public library system of Montreal

books per inhabitants), 11,000 periodical subscriptions, almost 390,000 audio-visual documents and nearly 104,000 documents of different categories. The whole represents an investment of about \$69 million CAN a year.

As for the population of the new municipality of Montreal, it now totals 1,812,696 inhabitants. The library system succeeded in reaching 36.3% of the total population. In certain boroughs, more than two thirds of the residents were and are active members.

The entire library system possesses 320 public workstations providing access to the Internet and 24 documentary management computerized systems using 8 different software. In this regard, major investments are foreseen in 2004 to begin the harmonization of the systems for all the libraries of the Island of Montreal.

Finally, it is important to mention the Associate Director of Public Libraries of Montreal with centralised units concerning Acquisition, Cataloguing, Processing and Expertise, assigned to Planning and Development of Library System, is in relation with the Directions of boroughs libraries to: contribute to the development of new programs, facilitate the acquisition and cataloguing process, assure the technical support for the integrated library system, produce policies and procedures, promote and advocate the library services to the population and stakeholders and finally collect statistics, propose standards and evaluate the performance of services points.

Quality Standards (Minimum standards and performance indicators) – Why?

First reason, the Government of Quebec, by decreeing and defining the specific legislative framework in the municipal merger process, obliged the former cities and towns to set out and provide minimum service standards. So, now these obli-

gations are specified by classes 143 until 146 of the new City Charter of Montreal. They must fix the level of services in each of the boroughs to assure service offerings in municipal libraries. Furthermore, by virtue of this legislation, the application of standards may not in any way compromise the autonomy of local library service management by Direction of boroughs. This legislation confirms the management autonomy of the boroughs as it relates to libraries. This is no mean feat, requiring a reasonable limit on the projected normalization process.

Second reason, the borough budget must be established by respecting these minimum service standards. The objective of establishing such standards is mainly to secure equality in documentary services for the citizens of the 27 boroughs by protecting a minimum threshold defined by norms. For this purpose the balance in endowments process will be based in function of disparities to minimal standards and the service levels will be defined by Consolidation plan. The quality standards must guarantee the minimum service levels in each borough.

Third, Québec Standards are not adapted to the required needs in term of quality indicators for Montreal Public libraries System:

- these standards are out of date (currently being revised);
- they are strictly based on indicators related to resources;
- there is an important inconsistency between some standards;
- socio-demographic factors are not taken into consideration as population density and socio-economic factors;
- service levels are not included;
- no performance measures were established.

Finally, the fourth reason is the quality standards are essential parameters to support the Network consolidation on these three levels: to assure fine tuning of the new network, to secure quality of document services offered and to introduce a model of service levels.

Quality Standards (Minimum standards and performance indicators) – Objectives

By virtue of this major administrative reorganization, the Direction of the Montreal public libraries wanted to use this opportunity to give to the new library system: standards of quality and performance indicators. In accordance with studies showing disparities in socio-demographic factors, deficiencies in resources and imbalance in the service offer, the new standards have to favour the diversification of service levels throughout the territory of the Island of Montreal, according to parameters appropriate for each of the groups or the families (in reference to an analysis, integrated by quartiles, and a comparative study that considered the socio-demographic characteristics, resources and anti-

icipated degrees of use of the resources and the services and the proximity of service points) of libraries, and the reorganization of the new library system. These quality standards will be determined with purpose to realize these six objectives:

- to offer equitable access to document services²;
- to assure library effectiveness in providing users with document services;
- to optimize efficiency of the reader advisory services offered;
- to harmonize the services with the City of Montréal's strategic plan;
- to consolidate the newly reconstituted network and plan the activities that remain;
- to propose minimum standards in keeping with the socio-demographic characteristics of the boroughs.

Quality Standards (Minimum standards and performance indicators) – Means

To this end, the Direction of the Montreal Public libraries, with the cooperation of the borough administrations, created, in the spring of 2003, a Committee of Minimum Service Standards. The members of this Working Group are:

Boroughs:

- 2 directors (Culture, Sports, Leisure and Social Development)
- 6 divisional heads (Culture and Libraries)

Central services:

- Finance
- Associate Direction of Libraries
 - Associate Director
 - Divisional head
 - 2 advisors in document resources

The Committee of Minimum Service Standards is responsible to:

- coordinate the assessment study;
- propose a business plan;
- develop new quality standards and propose performance measures;
- propose a consolidation plan.

By virtue of these four activities, the Direction of Montreal Public libraries gave to the Committee of Minimum standards the following mandate:

- to express strategic orientations and specific objectives of library services;
- to propose criteria or application bases for norms proposed according to the recommended services and to the state of disparity of the current resources;
- carry out analyses and required simulations by taking into account criteria

- or application bases recommended for each of the specific objectives to fix just and fair minimum thresholds;
- identify the relevant performance indicators for each of the minimum service standards retained;
 - clarify harmonization efforts of information management to grant and to propose modalities to achieve goals;
 - recommend a strategic plan of application and the phases of establishing the new minimum service standards;
 - devise appropriate follow-up reports integrating the selected performance indicators (as balanced scorecard).

According to these specifications, this mandate includes three facets: conceptualization of minimum standards of services, determination of appropriated performance indicators and harmonization of information management.

Considering the scale of the work, schedules were extended to allow the application of the main minimum standards as well as of performance indicators by the end of 2006 or later during spring 2007. In addition to this work, a sub-committee of the Committee of Minimum Service Standards was appointed to make a more specific diagnosis of all the policies and procedures of documentary treatment. In the autumn of 2004, the Committee of Minimum Service Standards must propose the application of optimum practices of documentary treatment and the creation of permanent of Committee of Experts in technical services to determine new orientations in term of treatment of documents for new network of public libraries in Montreal.

First, the committee defined the specific objectives which can be realized more easily with the use of minimum service standards. As mentioned by David Fuegi in his paper of allocution³, at IFLA Conference in 2005 held at Buenos Aires, who described the British standards, the definition of specific goals is essential to propose relevant quality standards in furnishing a service required by the served clientele. The definition of such specific objectives allows us not only to direct the action plan but also to make budget choices, to facilitate the creation of a priority action plan and to better frame the evaluation of the performance. A first exercise, focusing more on current activities, resulted in the proposal of 51 specific objectives. This operation required profound revision of strategic axes and specific objectives according to the mission of the libraries of Montreal and the action priorities resulting from the analysis. A more systematic approach focusing on management through goals enabled us to give more definition to action priorities. We will clarify this further on.

As well as assuring the supervision and validation of the analysis work, the service standards committee defined the parameters of its mandate to well define its reach regarding the execution of the diagnostic of the state of the operating situation and the consolidation of the library system. Furthermore, it identified the sectors in which standardization could be useful to be developed and will be susceptible to future interventions, the main concerns of management and activities appropriate to each.

The following six sectors of standardization were retained:

- **services:** reference, loan, user assistance including consultation of electronic resources, document reservation, education, clientele with reduced mobility, outreach, renewals, fees, core list of services and opening hours;
- **human resources:** staffing, ratio per capita, adequacy of required staff taking into account rush hours, training, etc.;
- **collections:** quantities required for each of the document types and support according to targeted clientele (adults, children, young adults, elderly, ethnic groups, weak readers and students), application base of the allocation indices, renewal of collections, number of copies, optimal rotation of collections, proportion of Quebec editions, specific clientele;
- **spaces:** location of the points of service, required dimensions, correlation of spaces according to activities, functionality and maintenance, accessibility and equivalence according to the types of clientele;
- **electronic services:** organization of sufficient spaces, renewal of basic collections, facilities and equipment adapted to the service offer and new equipments, minimum threshold of services, staff training and public education;
- **public information and educational activities:** organization of dedicated spaces, documents specialized staff, Staffing required, number of activities, outreach (collections, staff, clientele).

The realization of this multi-action project is extremely important, a plan that will determine how the new library system is consolidated and which is indispensable to the successful application of the consolidation plan. Beyond the characteristics revealed by the analysis and the operational analyses as well as the more specific projections ensuing from the first exercise, the standards committee considered the repercussions of the cultural policy statement of the new city, this policy was presented during autumn 2004 and that stems from ideas generated by the Montreal Summit in 2002. It must also consider operating results since the merger, among them the impact of user migration, the beginning of work on harmonizing the systems and the impact of work by political consulting committees. Furthermore,

the opening of new units in the library system deserves an updating of examinations undertaken within the framework of the analysis.

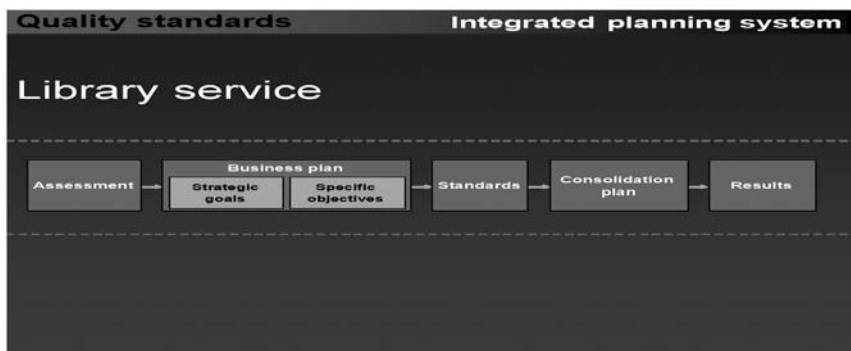
Finally, the development of new standards must take into account the opening of the *Grande bibliothèque du Québec*, combining the vocations of national library and research centre as well as public reference library.

Assessment: functional portrait of the Montréal libraries

Following the merger of the former 27 suburbs and city of Montreal, the government of Quebec and the City of Montreal realized the necessity of analyzing the state of the library system, to determine priority improvements and plan its consolidation. The Service of cultural development of the City of Montreal and the Ministry of Culture and Communications of Quebec shared the responsibility of carrying out this diagnosis. It aimed at profiling the situation of the libraries of the Island as a whole, both internally (resources) and externally (utilisations figures) by examining the following sectors:

- human and documentary resources and buildings;
- services to the library users;
- services to libraries;
- clients or library users;
- new technologies;
- performance of services;
- service area.

The Assessment is the first step of our transverse approach as an integrated planning system.



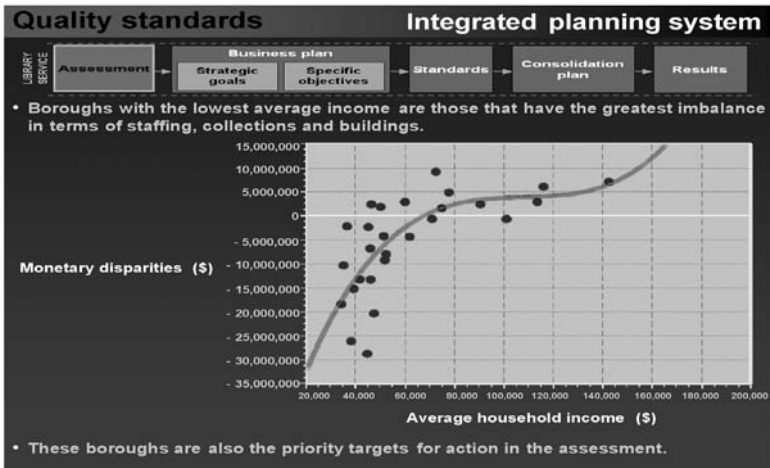
This work was overseen by the Committee on the minimal standards of services, which we described before. A preliminary report was submitted to the Ministry of

Culture and Communications of Quebec in August 2003. An improved version including a more detailed description of the strengths and weaknesses of some components of the library system and a comparative analysis is now underway. The purpose of this new version is to facilitate the identification of priorities of consolidation and development. This will support our negotiations with the Ministry of Culture and Communications as well as help to plan the upcoming consolidation of the library system, to develop new standards adapted to the application of new strategic developmental axes to better adapt the service offer to the diverse levels of documentary services in Montreal and to introduce performance indicators. The first part of our presentation consisted to dress the principal weaknesses and disparities of service points in 27 boroughs relatively to Annual opening hours, Staff, Document resources and Area Space.

Next figure illustrates the importance and amplitude of principal disparities:

Quality standards		Integrated planning system		
LIBRARY SERVICE	Assessment	Business plan		Standards
		Strategic goals	Specific objectives	Consolidation plan
				Results
Weaknesses	Disparities	Priorities		
Annual opening hours	8,701	Optimization of opening hours		
Staffing		Additional employees to improve service to young people and reader advisory services in target boroughs		
Librarians	72			
All employees	263	Updating the collections of libraries that are less well endowed		
Document resources (books)	1,242,249			
Space	30,302 m ²	More than a dozen building projects (additions, upgrading to standards, relocations or expansions)		

Also, our transversal study with socio-economic factors indicate us that boroughs with the lowest average income are those that have the greatest imbalance in terms of staffing, collections and buildings.



The results of our Assessment were presented in details in the first part of our presentation at Bergen's Conference and this one can be accessible on our web site to the address <http://www2.ville.montreal.qc.ca/biblio/> (click on the red icon named DIAGNOSTIC (*Version anglaise PDF – 3.7 Mo*) to download the English version).

Collaboration on the international level

By participating in the work of various committees of experts looking into this matter, particularly the International Standards Organization (ISO) and the IFLA, it seemed inevitable that the Montreal public library system would be inspired by recognized practices. So, at the level of performance evaluation, undoubtedly, it is clear that we will have to refer to the standard ISO 11620. Nevertheless, to have legitimacy, we can and must develop our own performance indicators for certain activities, among them, the evaluation of user migration.

However, as for the crafting of a consolidation plan according to minimum service standards, strategic economic planning and management through specific goals, it seemed to us extremely relevant to have recourse, in particular, to British expertise. In this regard, the Library and Information Statistics Unit (LISU) of Loughborough University has been associated, since August 2003, with the Montreal public library project and has made various observations and given us professional advice that has guided the project team.

Also, David Fuegi of MDR Partners has been consulted at certain stages of the project. Future exchanges with other institutions in other countries are envisaged,

especially those that have adapted similar approaches, such as those in Europe.

Evidently, the definition of strategic axes and specific objectives in the Montreal public library system is largely inspired by work done in this field in Great Britain. We particularly referred to the plan of British development presented in 2003 by the Department for Culture, Media and Sport in its document, “Framework for the Future: Libraries, Learning and Information in the Next Decade⁴”. This plan is based on standards proposed before in the document: “Comprehensive, Efficient and Modern Public Libraries; Standards and Assessment⁵”.

Business Plan: Strategic goals and Specific objectives

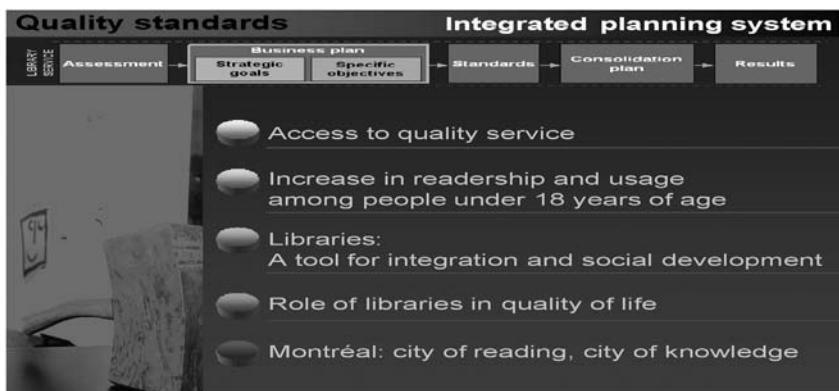
Following the merger of 28 municipalities on the Island of Montreal, according to the ideas generated of the Montreal Summit in 2002, it was inevitable that we would have to consolidate the library system, considering as “proximity service” under the responsibility of each borough. This was done by analyzing the situation (the diagnosis) and by the consolidation plan. That one should include strategic axes and specific objectives. The realization of these specific objectives would be assured with the aim of the infringement of thresholds defined by minimal standards of service and estimated by specific indicators of performance at each of the fields of normalization.

Considering that there was a gap between supply and demand (that is the deficiency of the resources required by virtue of expected needs and of levels of use of the services and the documentary resources anticipated by comparison with tendencies followed by large Canadian Public library systems with superior performance), and disparities in the resources and socio-demographic characteristics among the boroughs of the new city, new standards favouring the diversification of the levels of documentary services must be conceived. The project of Montreal public libraries illustrates the importance to define minimum standards and determine performance measures according to the mission and specific objectives of the Organization.

To redefine the new standards that must be recommended for Montreal, it seemed relevant to opt for a transverse approach inspired by management through goals. Therefore, according to the specific objectives retained, the identification of normative indicators (minimum service standards) and of performance indicators, to measure the degree of infringement of the standards, seems more coherent and more justifiable.

A strategic planning sub-committee was put in charge of developing a strategic plan and submitting it to the minimum standards committee. This plan contains five (5) strategic goals or axes and 17 specific objectives.

We present in next Table these five (5) strategic goals.



Among these 17 specific objectives, we identified two levels of intervention:

- consolidation of library system;
- strategic planning development.

Seven of these specific objectives can be associated with the consolidation of the library system, whereas the others are more in the order of a plan of strategic development, over the more or less long term. As a result, we considered that the development of minimum service standards first had to be carried out according to the orientations given to the consolidation of the library system.

The sub-committee also raised a list of management concerns associated with each of these specific objectives. For the moment, there are 46 of these concerns. Finally, certain means (50) allowing us to realize these management concerns were identified.

So, the first strategic goal “Access to quality of service” will be assure by the realization of these five specific objectives:

- provide appropriate facilities and spaces;
- implement basic services in each boroughs;
- purchase adequate and diverse resources of library materials and offer required quantity of documents;
- provide adequate and qualified human resources;
- collaborate with the *Bibliothèque nationale du Québec*.

Second strategic goal « Increase readership and usage by people less than 18 years of age » will be supported by expanded services for young people. This is the sixth specific objective.

Finally, the third strategic goal concerning the role of libraries as tool of integration and social development consists to offer collections and develop specific programs customized for varied target clientele. It is our last specific objective of Consolidation plan.

Next figures dress these specific objectives in function with these three strategic goals of first part of Business plan focused on consolidation of library system.



Principal Minimum standards

Consequently, the sub-committee of strategic planning retained for this first phase 10 management concerns and gave priority to 14 fields of standardization judged to be the essential premises for the new standardization plan. These 14 fields of standardization are as follows:

Specific objective/Management concerns (Phase 1)	Fields of normalization (priority)
<p>1.1 Offer library users a network with sufficient facilities, equipment and physical space to meet their needs.</p> <ul style="list-style-type: none"> • Be equipped with adequate physical spaces and in sufficiency. • Insure to the users the proximity of libraries. 	<ul style="list-style-type: none"> • Standard of minimum space; • Reduction of the deficit of building maintenance; • Areas of service according to population density, proximity and certain other factors and the levels of required service; • Criteria of location of the points of service and the auxiliary services.
<p>1.2 Offer users a range of common and user-friendly services for all boroughs, integrating the local peculiarities.</p> <ul style="list-style-type: none"> • Develop criteria to assure the availability and the quality of the common services. • Insure a minimal number of opening hours all the libraries. • Harmonize the integrated library systems. harmonized. 	<ul style="list-style-type: none"> • Core list of the basic services to be offered free of charge; • Loan and universal return in the whole of the library system; • Minimum number of opening hours; • Computer system of documentary management.

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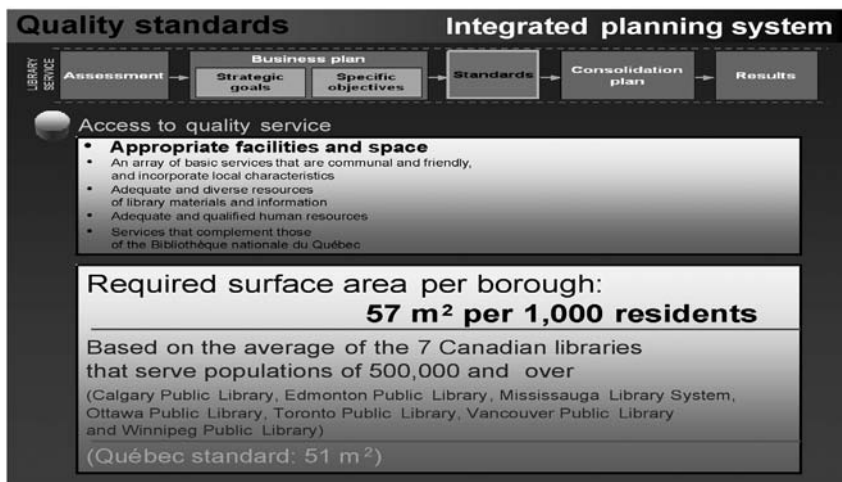
<p>1.3 Offer a varied range of documentary and information resources which meet the needs and preferences of the users.</p> <ul style="list-style-type: none"> • Make an upgrade of the collections of the sub-endowed libraries. • Define the main parameters of the development of collections in other languages (than French and English) and agree of a sharing of the tasks and expertises of the units of Library system. 	<ul style="list-style-type: none"> • Criteria of endowment of collections compared to a plan to upgrade collections aiming to determine optimal quantities of documents required; • Axes of development of linguistic collections.
<p>1.4 Offer users a quality client service which depends on the excellence of the human resources.</p> <ul style="list-style-type: none"> • Have qualified human resources and in sufficiency. 	<ul style="list-style-type: none"> • Human resources according to the levels of service, opening hours, the population served and educational and public information activity needs; • Distribution of human resources by categories of employees.
<p>2.1 Supply the youth clientele with more and diversified services better adapted to its needs.</p> <ul style="list-style-type: none"> • Make accessible to the clientele youth of the specialized human resources. 	<ul style="list-style-type: none"> • Allocation of the human resources for the youth sector.
<p>3.1 Maintain and develop collections and specific programs adapted to the targeted clientele.</p> <ul style="list-style-type: none"> • Maintain and develop programs in technological literacy. 	<ul style="list-style-type: none"> • Free accessibility to the Internet.

Regarding these 14 fields of normalization, different analyses and simulations will be carried out over the next few months to determine the number of normative (minimum standards) and performance indicators. It is difficult for the moment to overestimate the number of indicators which can be proposed following this work. At the time of this writing, we are at the stage where we are determining, for each of these 14 standardized fields, the list of dependent variables to identify the components of the eventual indicators, determine indicators that must be simulated as well as the potential bases of application to be tested (e.g.: population density, indication of socio-economically underprivileged population, degree of clientele proximity, etc.), while favouring diversification of standards according to groupings (or families) of libraries and the level of service offer. For example, standards indicators could express themselves as follows:

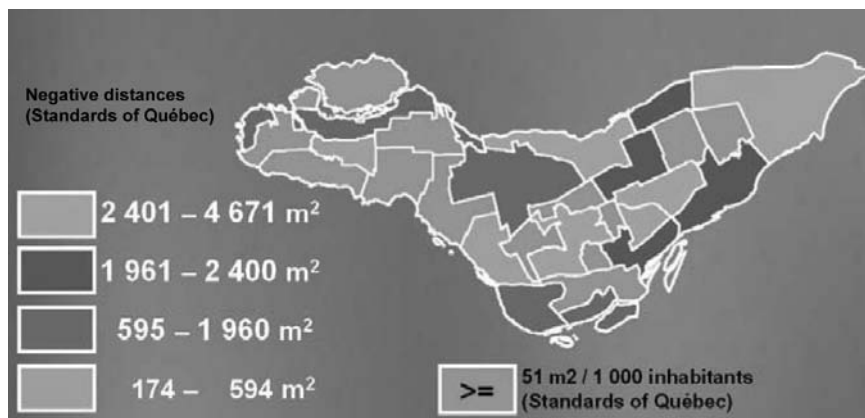
- surface area required according to the level of services (indicator of the standards in human resources and inventories of required collections) and of socio-demographic factors (as population density within radius of service area);
- number of FTE required according to the population density within the radius of service offer and the level of offered services and an early indication of use (indicate to define);
- number of books required in function of rotation rate X and of a anticipated lending rate per capita Y— the whole of which can be the object of a stronger indication taking into account the use and the aging of collections compared to a level of targeted service or a targeted rate of use.

But, the principal indicators, by benchmarking with Large and Urban comparable Canadian libraries, are now determined.

First one, the *surface area* per borough, will be fixed to 57 m² per 1,000 residents.



According to *Programme d'aide financière aux équipements culturels*, [Grants Program to cultural equipments] (Québec, juin 1991), the required area of library building is defined in function of the served population. Consequently, Montreal public libraries should have an area equivalent to 51 m² / 1,000 habitants. Now, the Assessment report confirm the present areas of service points of Montreal



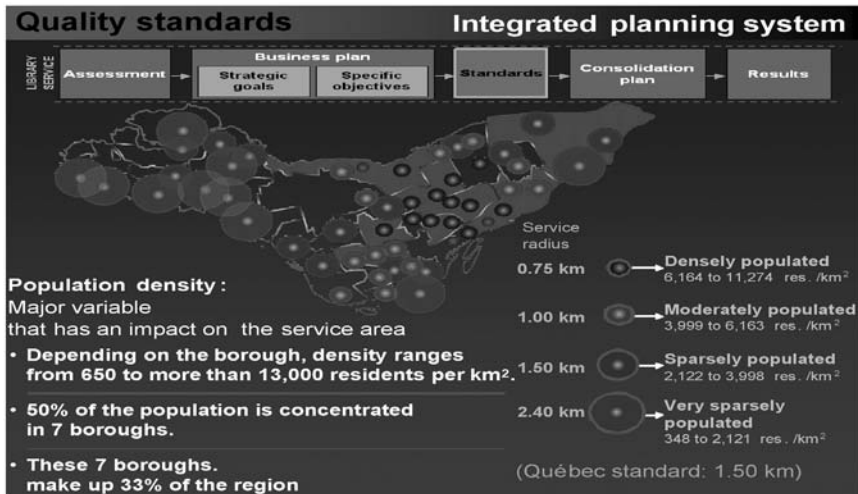
public library system indicate us that 50% of boroughs offer service points with a large deficit of areas. Also, the deficit of spaces is very variable for 15 boroughs and is larger in the former Montreal territory specifically in the central area of the city in which the density of population is substantial.

This disparity of deficit in spaces according to required space is well illustrated by the present map. Less than 20% of boroughs have less than 50% of required space recommended by *Standards of Quebec*. But 40% of boroughs are served by libraries localized in buildings with larger space (or area) as recommended by *Standards of Quebec*.

Finally more than 60% of boroughs offer less space in comparison with the mean space (57 m² / 1,000 inhabitants) of large Canadian public libraries serving 500,000 inhabitants.

Besides, the Montreal territory is characterized by a marked variety with the concentrations of population. For example, 50% of Montrealers are localized in 7 boroughs. These 7 boroughs cover 33% of territory superficies on Montreal Island. According to *Standards of Quebec*, the population to be served should be localized inside of a radius of service equivalent to 1.5 km.

We illustrate on next map the *service areas* (in term of *radius of service*). The concentration and overlap of radius of service, localized specifically in the center of the Island of Montreal, should not be considered as overestimates service to real needs. Some simulations were analysed to identify the real deficit of service points or library services on the territory.



The simulation of *radius of service* equivalent to 0.75 km for libraries localized in borough with a very large density of population should be probably more appropriate, illustrating the deficit in service points. Also, for boroughs with less density of population, the size of radius of service could be increased more than 1.5 km as recommended by *Standards of Quebec* as 2.0 or 2.4 for boroughs with weak density of population. This analysis will facilitate the determination of basis or criteria of application of minimum standards in function of proximity indicator, density of population, distance between neighbour libraries and socio-demographic characteristics of boroughs.

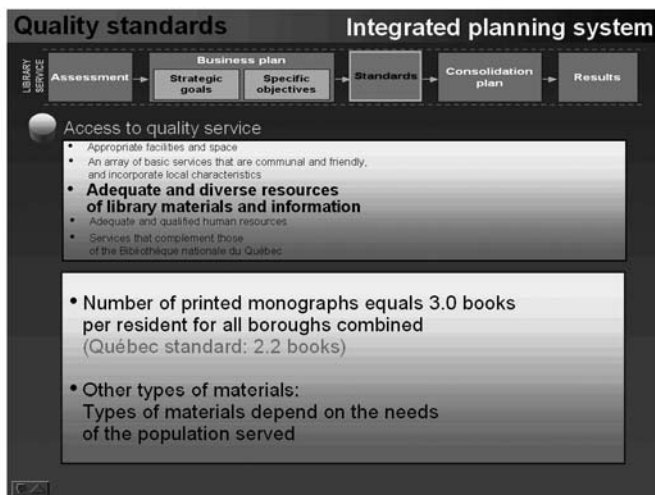
This approach is used to optimise the reduction of disparities in term of served population. The new criteria of application of minimum standards based on density of population and other socio-demographic factors instead of served population is more appropriate and relevant in regard with a urbanized territory as in Montreal and open new perspective levels of services and inter-boroughs cooperation.

The second series of minimal standards of services concern the *access to basic services*. According to benchmarking study of opening hours offered by boroughs, against the large deficit and disparity of opening hours offered by some boroughs, we propose to increase substantially the opening hours. We introduce this global approach:

- Minimum non-duplicated opening hours per borough: 62 hours;
- Minimum non-duplicated opening days per year: 324 days;
- Weekly schedules: 50% of opening hours are outside office hours.



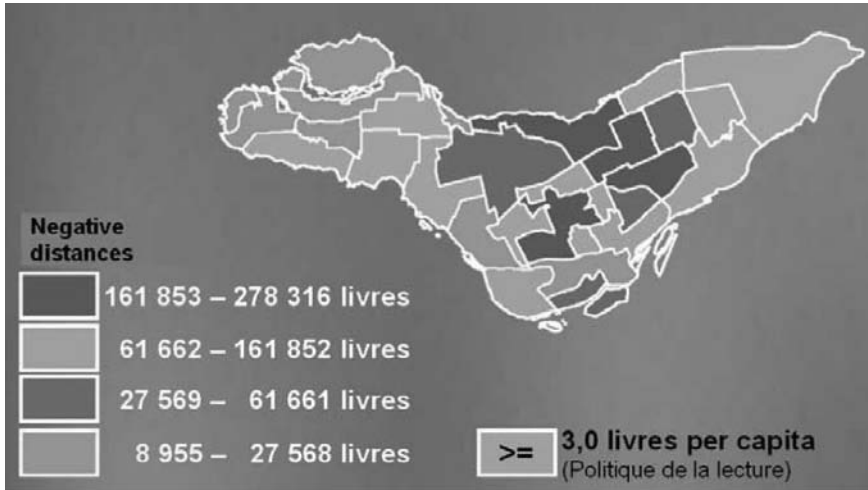
The third category of quality standards concerns the *required resources of library materials*. We propose a required collection of printed monographs based on target of National promoting program, 3.0 books per resident for each borough.



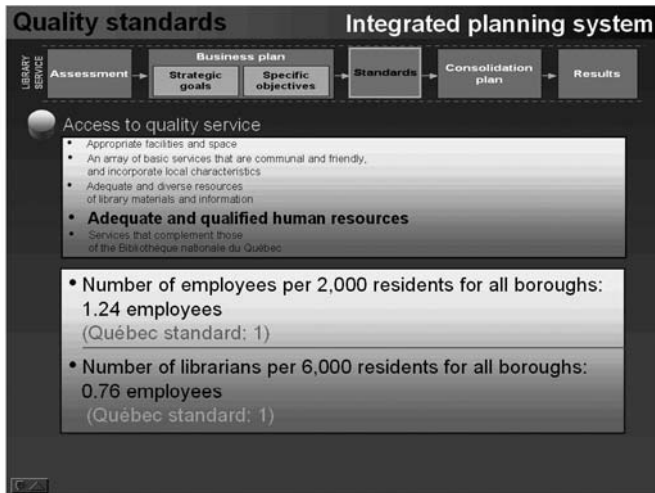
According to *Standards of Quebec*, libraries of Montreal should have a holding equivalent to 2.2 books per capita. Some important deficits have to be reported because a little less of 60% of boroughs (16/27) have less of 2.2 books per capita. Also, about 67% of boroughs (18/27) have less than 3.0 books per capita. So to have an equivalent holding as recommended by the National promoting program of books and reading it would be necessary to add a little less of 1,550,000 books to present collections.

The next map illustrates this disparity of book holding deficits.

Again we report a large disparity of deficits of holding of books in comparison with required collections. Some boroughs have larger deficit than 275,000 books and others a deficit equivalent to 9,000 books. Nine boroughs have more than 3.0 books per capita. The largest deficit is in boroughs localized in middle of Island of Montreal.



inally, the last standards concern *staffing*: according to benchmarking with human resources of Large and Urban Canadian libraries we propose to increase the number of employees from 0.95 employees per 2,000 residents for all boroughs to 1.24 employees. On the same way, we increase the number of librarians from 0.52 to 0.76.



Furthermore, next months, after the up-dating of data used for the assessment, we will determine other minimal standards on specific resources to support level of services in liaison with planned and anticipated output. Before the implementation, it was important to define the first level of services (free basic services). We mean the Services that must be offered in order to maintain a functional library. These Services were determined by Managers of library services in boroughs and members of Committee of Minimal Standards and Experts working on Planning and development of new Programs to the Central Services.

The List of free basic services to be retained is presented in next figure. The methods of providing the range of basic services will be covered by minimum standards.



The coverage of standards will be on these three levels in function of services and will provide to support any issues of inter borough collaborations:

- Libraries;
- Boroughs;
- Network:
 - All boroughs and the associate Direction of Libraries
 - Interborough

Consolidation plan

According to priorities determined in Assessment report and disparities with Large and Urban Canadian public libraries we estimated the required funds for

Montreal Public Libraries System to achieve minimum standards of quality described in the previous part of this presentation. The timeline of this Consolidation plan is next 10 years. This one includes recurrent expenditures (operating expenditures) and investments corresponding to expenses of more than 200,000 millions of Canadian dollars. The next two figures present these investments.



Results: projected impacts of the Consolidation plan

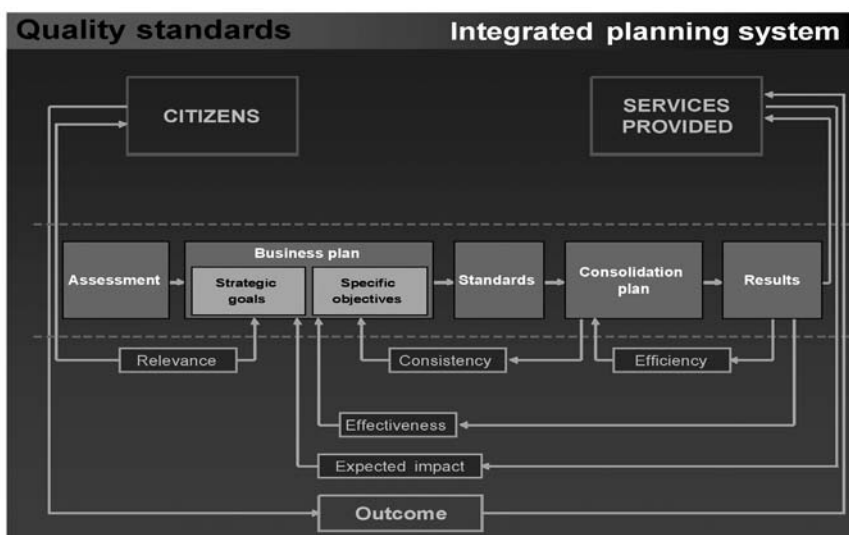
The main impact of this Consolidation plan will be on multiple levels:

- Reduce the disparity in invested resources compared to Canadian libraries that serve population of 500,000 and over

- Build up a basic document service
- Diversify the availability of service levels while taking local characteristics into account
- Implement a network service while relying on inter borough cooperation and the support of central services – for increased efficiency
- Improve coverage of the region, taking socio-demographic disparities into account
- Increase the user base by approximately 7 million visitors
- Increase the lending rate by 9.6 million loans

Integrated planning system of standardization and performance evaluation of libraries

The consolidation plan of new Library system of Montreal will be conducted as illustrated by the Integrated system of standardization and performance evaluation of libraries⁶. This system could be described as explained in next paragraph.



This one intervenes at two levels represented well in our plan. The median level illustrates again the dependence between the specific objectives of the library system and the normative indicators function of different criteria established by means of preliminary simulations.

As for the lower level, indicators of performance are selected to estimate:

- the relevance of specific objectives in regard with the needs of library users;
- the appropriateness of specific objectives and resources (documents, human resources, buildings and equipments), selected activities and services;
- the evaluation of distance between specific objectives and means;
- the effectiveness of activities conducted by the library on social level (impact of documentary services and resources) and in terms of quality (satisfaction in regard of services);
- the efficiency of means used (staff, documentary resources and financial resources) from the point of view of the productivity while optimizing the costs of operation;
- the evaluation of impact of services in function of projected specific objectives;
- the evaluation of the outcome or of the impacts on served population in function of services offered.

So, the minimal standards of service are in the heart of the Plan of consolidation and the introduction of the indicators of performance allows to make sure that not only the minimal standards of service are affected but that the Plan of consolidation comes true in a optimal way and allows the new library system to meet the needs adequately.

Furthermore, next year, in the light of the recognized indicators either by the International Standards Organization (ISO 11620) or by American Library Association or as needs be, following our own model, measures of performance both at the resource and at the output levels will be determined.

Conclusion

We could conclude by considering that the project of new normalization begun by the Public Library System of Montreal exemplify a basic principle. The selection of indicators and measures of performance must always relate to the plan of strategic development of the library by referring to the specific objectives. Furthermore, the choice of statistical data, normative indicators and measures of performance must address the needs of the relevant stakeholder groups and support the Business plan.

With regard to *Standards of Quebec* in comparison to the large urban library systems in Canada, certain libraries of the suburbs of Montreal are short of documentary and human resources. Benchmarking shows the need to reduce major socio-demographic disparities by reviewing the location of certain service points and the possible implementation of auxiliary services. The new Public Library System of Montreal will develop a more adapted set of standards based on the identification of strategic axes and specific objectives. Looking at the benchmarks, it seems

necessary that the new standards should define service levels based on groups of libraries. Within the framework of the first phase of the project, an exercise of “prioritisation” of 14 fields of standardization will identify the main standards which will bring about consolidation of the new Library system.

Finally, before proceeding to the second phase of creation of minimum service standards, we intend to begin the process of harmonizing management information management information to make sure of the comparability of the performance measures that will be eventually put into effect. Also, we intend to develop, with the collaboration of recognised experts, follow-up tools or quality control measures with a Balanced-scorecard, not only to make sure of the efficiency of the activities put in place in view of the strategic plan but especially to evaluate the outcome resulting from this first phase of the implementation of the strategic plan.

Notes

- 1 *Pour des bibliothèques québécoises de qualité: guide à l'usage des bibliothèques publiques*. Montréal: ASTED with Les Bibliothèques Publiques du Québec and Le Regroupement des CRSBP du Québec. 1996. 104p.
- 2 For reference see the model on the evaluation of social impact of public libraries proposed by the Department of Information studies of Sheffield University: Usherwood, Bob et Rebecca Linley. 2000. Evaluating equity in public library services. *Journal of Librarianship and Information Science* 32 (June): 72-81.
- 3 Fuegi, David. 2004. Recent developments in the application of statistics, standards and performance indicators in public libraries in England. In *Libraries: Tools for education and development – World Library and information Congress: 70th IFLA General Conference and Council*. Buenos Aires: IFLA, session n^o 131.
- 4 *Framework for the Future: Libraries, Learning and Information in the Next Decade*. London: Department for Culture, Media and Sport, 2003. 59p.
- 5 *Comprehensive, Efficient and Modern Public Libraries; Standards and Assessment*. London: Department for Culture, Media and Sport, [2000]. 18p
- 6 Giappiconi, Thierry. 2001. *Manuel théorique et pratique d'évaluation des bibliothèques et centres documentaires*. Paris: Cercle de la librairie, 223p.

Abstract

Following the merger of 28 municipalities on the Island of Montreal (Canada), the analysis on the state of this library system revealed an imbalance between the service offer and the demand. Compared to the “Standards of Quebec” and other urban library systems in Canada, certain borough libraries of Montreal demon-

strate marked deficiencies to the spaces and documents. Concerning the current library service, major disparities from the point of view of socio-demographic characteristics demand. Re-evaluation of the location of certain points of service and the possible implementation of auxiliary services. The consolidation envisaged for the new library System of Montreal will realized by creating new minimum service standards favouring levels of service offers and groupings of families of libraries, as well as introducing performance indicators. These two types of intervention will be defined according to a strategic plan of five axes or strategic objectives, 17 specific objectives and a little more than 40 management concerns. A first phase of the project is already underway to determine normative and performance indicators for 14 fields of standardization considered to be priorities and support a Consolidation plan. The new standards will be determined for each group or family of libraries in reference to an integrated analysis (simulation) by quartiles and comparative study of socio-demographic characteristics, resources and anticipated degrees of use of the resources and the services. The first main standards concern Library material resources, opening hours, required human resources, location of service points and spaces based on density of population and socio-demographic factors instead of served population are more appropriate and relevant in regard with urbanized territory as in Montreal and open new perspective of inter-boroughs cooperation. The free basic services that be offered in each boroughs are determined and the consolidation plan proposed to reduce disparities and to achieve new minimum standards of quality is briefly described.

Résumé :

À la suite de la fusion des 28 municipalités localisées sur l'Île de Montréal (Canada), le diagnostic sur l'état des bibliothèques publiques révèle un déséquilibre important entre l'offre et la demande. En regard des « Normes du Québec » et en comparaison aux grands réseaux de bibliothèques canadiennes, certaines bibliothèques d'arrondissements de Montréal dénotent des carences marquées aux plans des ressources documentaires, des heures d'ouverture, des ressources humaines et des espaces. Au chapitre de la desserte actuelle des bibliothèques, des disparités majeures sur le plan des caractéristiques socio-démographiques engendrent la réévaluation de la localisation de certains points de service et l'éventuelle mise en place de services d'appoint. La consolidation prévue du nouveau réseau des Bibliothèques de Montréal se réalisera par la conceptualisation de nouvelles normes minimales de service, favorisant l'offre de niveaux de service et la segmentation par regroupements de familles de bibliothèques, ainsi que par l'introduction de mesures de performance. Ces deux types d'intervention seront définis en fonction d'un plan stratégique composé de cinq axes stratégiques, de 17 objectifs

spécifiques et un peu plus d'une quarantaine de préoccupations de gestion. Une première phase du projet est en cours afin de déterminer les indicateurs normatifs et les mesures de performance des 14 champs de normalisation jugés prioritaires en vue de soutenir la mise en œuvre d'un plan de consolidation du réseau. Les normes principales concernant les ressources documentaires, les heures d'ouverture, les effectifs requis, la localisation des points de service et les espaces établies en fonction de la densité de population et des caractéristiques socio-démographiques au lieu de la population desservie sont mieux adaptées à un territoire fortement urbanisé comme celui de Montréal et ouvrent une perspective de collaboration inter-arrondissements. Les services de base gratuits devant être offerts dans chacun des arrondissements sont également énoncés et un plan de consolidation afin d'éliminer progressivement les disparités et de permettre l'atteinte des nouvelles normes de qualité est brièvement décrit.

“Using Customer Data for Improved Strategic Marketing Planning and Decisionmaking”

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Introduction

Awareness of and access to geographic data is complex and new to many professions, including librarianship. Geographic data is best described as information such as the geographic boundaries of the neighborhood the library serves, characteristics of the people who live there (age, language spoken, level of income and education), and how far library users and potential library users live from the library. Library research indicates all these factors which are geographic in nature, affect library use. Which materials and services are consumed is called library use data. Collectively, these data are often called ‘customer data’ in the business world.

This paper introduces: 1) the four-step marketing model; 2) the critical nature of geographic/customer data relevant for strategic marketing planning and decision making in public libraries (although other types of libraries may also benefit); and 3) new technologies that facilitate use of geographic data such as GIS (geographic information system software) and the US Public Library Geographic Database developed by the GeoLib Program, Florida State University, Tallahassee, FL, USA, www.geolib.org/PLGDB.cfm .

Why Do Libraries Need Customer Data?

During the past century librarians identify people who use libraries, as patrons or users. Most recently some in the profession are calling users—‘customers.’ This new use of the word customer signifies that more and more librarians are aware of today’s competitive environment. Librarians who acknowledge competition concede that today’s libraries are only one of a myriad of information sources people can choose. Competitive organizations strive to know who their customers are, what product choices they may make, and where they live. In the past, libraries

often consider that they serve the whole of the public, and lack incentive to gather customer data. This may create a less competitive edge for the library. By contrast, collection of this data provides strategic insight into exactly who chooses to use the library, for what, how far they will travel, and how much time they will spend procuring library offerings, which ultimately affects type and level of library services.

Systematic Marketing Requires Customer Data

Marketing is the process of identifying and fulfilling customer needs within the mission and resources of the organization. Marketing is the driving force of any successful business or library. Effective marketing requires systematic data gathering regarding actual and potential customers. Without knowledge of customers it is impossible to optimize customer satisfaction which is the ultimate goal of marketing.

All kinds of organizations (including libraries) require customer information to effectively deliver services. Simple questions regarding the who, what, and where of customers, and the how and why of their behavior, must continually be answered. The answers to these questions not only identify customers' needs and desires, but how these change over time. This up-to-date customer data allows managers to provide the best product at the best price at the best place with the best communication to promote products. This provision of the 'best' is the essence of marketing including: market research (step one); market segmentation (step two); marketing mix strategy (step three); and marketing evaluation (step four). See Figure 1 for a depiction of the model. The following discussion describes the steps and inter-relationships, and verifies customer data is critical to the four step process.

Marketing Research: Step 1

The continuous acquisition and analysis of customer-related data is customarily called marketing research. Successful private and public sector agencies devote whole departments to this activity, and may even hire environmental scanners who gather customer-related data on a daily basis. Yet daily, librarians collect, organize and select data of every kind to solve every kind of problem for customers. So why don't librarians conduct these same activities for better library management? And why should they? (Koontz 2001.)

The Answer....Competition

Libraries are facing market competition like never before. Customers are eliminating actual library visits and accessing library databases via their desktop. Avid readers are logging onto Amazon.com rather waiting for interlibrary loan. A plethora of information resources continue to burgeon via broadcast, print and online. Customers



Figure 1. The Four Step Marketing Model

face many choices. The library is no longer the premiere community information provider. Parallel—libraries are vying with other public agencies for same public dollars. And the greatest competitor for any group is simple acceptance of the status quo. This attitude, which overlooks customers’ changing expectations, leaves many a business with a ‘closed’ sign swinging from the front door.

Any agency facing competition must prioritize gleaning and gaining cutting edge customer data. For libraries—it is more important than ever to identify *changing* customer characteristics and information needs. This is necessary for libraries to viably compete, and offer the most desired and effective services and materials possible. Simply, there is less and less margin for wasted effort of staff or funds.

In today’s increasingly heterogeneous and technologic society, dynamic and ongoing customer research is crucial to provide library services and materials that meet complex needs in ever-changing communities. Also, available research regarding customer use of public libraries indicates that for certain groups such as the elderly, juveniles, lower income or minority or immigrant groups—libraries must be placed within ‘stumbling distance,’ (this also includes easy computer access)—for these groups to have the opportunity to develop the skills associated with library use, including the reading habit. Not only can something as obvious as distance or lack of transportation be a prohibitive factor to library use, but also

more subtle cultural barriers can be identified, such as the beginning or the end of a perceived neighborhood. Some groups do not and will not travel beyond that invisible line. Library managers must be cognizant of what changing factors increase and decrease the customer base. Other public sector agencies successfully adopted marketing research practices to identify competitors and better address the unique needs of customer markets. Why not public libraries?

Critical Library Customer Data

One of the most important external customer-related data collected by libraries is a demographic description (population characteristics) of the people in the market area. The *market area* is the actual geographic area that customers and potential customers are drawn from.

Demographics relevant to public library use may include categories such as, income, age, family life cycle status, ethnicity or race, and education levels. Other important factors gleaned from environmental scanning, include topographical and cultural features that extend or delimit library use, proximity of library customers to transportation and schools, distance between libraries, and location of competitors (Koontz 1997.)

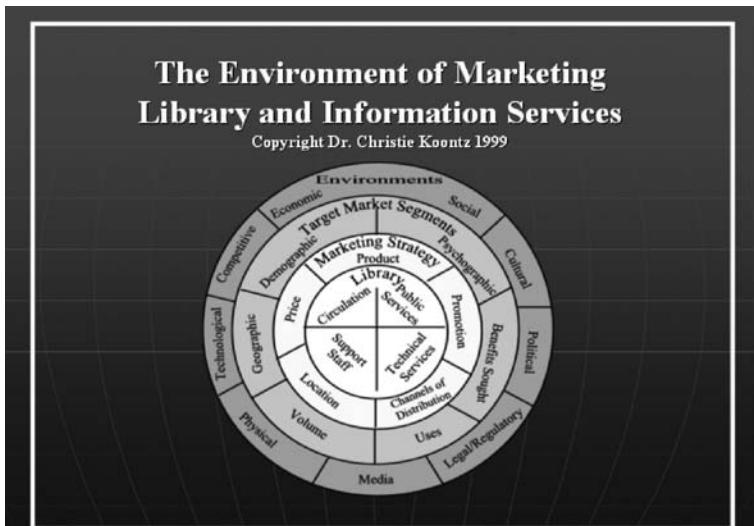


Figure 2. External Environment of Library and Information Services. This graphic is based upon Koontz’s work with Persis Rockwood, Professor Emeritus of Marketing, Florida State University. Similar visuals are used in marketing texts to communicate external environmental factors.

This market data is external to the library – or extracted from external environments outside of the library’s immediate control. Interestingly enough, most libraries collect this type of data for customer use. See figure 2 for an example of a library and its external environment.

It is important to remember people choose to spend their time traveling from their home to places to purchase or access services. It matters to customers how far they have to travel – and therefore, it must matter to library professionals where customers live and the possible distance they will be required to travel. People primarily travel by foot, bus, subway, or car. Without a geographic market area determination the characteristics of the people that live there can not be described. For libraries serving changing populations with changing information needs, this user information is critical. While libraries rarely map customer data, they have in the past needed to ascribe service areas to branches to assess the presumed extent of library services geographically. This presumption is often inaccurate and not based upon true customer dispersion.

Background of the US Public Library Geographic Database

It is said that 80% of all governmental data has a geographic component to it. Some geographic data such as street addresses have a more precise location than other geographic data such as land use zoning or school districts but all geographic data can be displayed on a map relative to other geographic data (e.g., how far away is the public library from the elementary school?) In today’s computerized environments, geographic data sets are often maintained in a geographic information system (GIS) environment. A GIS is simply a computer system with the associated software for collecting, storing, manipulating, analyzing and presenting geographic data about things that can be represented in a map form. The GIS is what brings the digital map on the computer screen to life—allowing additional geographic features to be turned on to zoom closer into a map, to view schools within two miles of the library, and utilized for geographic analyses questions (e.g., what percentage of current library users reside within one mile of the newly-relocated library outlet if it is moved?)

In the US, during the past few years, digital inventories of accurately-mapped public agency locations and associated critical information were developed by agencies such as hospitals, fire and police, and schools, oftentimes in a GIS environment. Some of these datasets may even be available through a library’s catalog. These databases are regularly utilized by policy and decision makers at all levels for administration and management, long and short range planning, regulatory decision making, and, most recently, for national security and emergency preparation (Koontz et al 2004.)

The other key data set is annual library use data for public library entities collected by a federal agency. These data are linked to the digital base map of approximately 9,000 library entity locations throughout the US.

US Public Library Geographic Database: A Tool for Marketing Research

Today, more than ever, public librarians are asked to address an ever-growing number of decisions and issues at the local, regional and national levels. Examples of questions that library managers and policy makers might face include:

- 1) Is the library providing the right balance of library services in light of changing populations and changing information needs? How should funding levels of local library service adjust to these changes?
- 2) How can public libraries help bridge the digital divide through provision of equitable access to the Internet?
- 3) What is the relationship between distance (i.e., to a facility, user travel time), and library use?

The answers to these and many other public library questions can often be best addressed (or even only answerable) by a database containing nationwide public library data linked to a geographic information system (GIS) base map. In such an environment, there can be linkages among different data sets to one another and each can be referenced to the appropriate geographic location on the earth's surface relative to each other. This was the reason the US PLGDB was created, and support by GeoLib developers continues to be sought from key stakeholders in the US public library field.

Without this type of data, the public library community can find itself in reactive situations much more often than proactive situations. The required information may not be available in a timely manner. As a result, surrogate data sets that may only be of marginal relevance to public libraries are used instead to make important decisions directly affecting public libraries. THE PLGDB facilitates the marketing research step, but is not in itself absolutely essential. Only the good customer data the PLGDB contains is essential to marketing research.

Marketing Segmentation: Step 2

With market research (step one) accomplished, a broad array of demographic and library use (customer) data is available. Managers can then conduct step two, market segmentation, the process of grouping customers with like needs, and then prioritizing segments for efficient and effective resource delivery. Librarians have been segmenting for years (i.e. juvenile, adult, mystery writers.) Again, this step is not possible without the customer data from the first step. See Figure 4 for an example



Figure 4. Customer Segmentation

of a customer segment mapped on the US PLGDB. This type of map display, and subsequent extraction of data from within the radius selected, provides quick review and data for managers asking ‘what if’ and ‘how many’ questions. For example, ‘what if’ the library closed—how far is it to the next facility, and how many people are possibly affected by the closure? Or ‘how many’ people live within two miles of the library?

Marketing Mix Strategy: Step 3

With in-depth knowledge of actual and potential customers, step three is now plausible. The marketing mix strategy is comprised of developing the product (a service or offer); setting a price (from a marketing point of view this is the sum of customer costs); delivering it (through place such as a library facility); and promoting it (publicity and other communication.) The marketing mix strategy is often mistakenly conducted as step one, instead of the preliminary and necessary steps one and two, market research and market segmentation. This is a considerable flaw in the marketing process for many organizations, as they proceed to develop an offer based upon company profits or goals that are not customer driven. Primarily, awareness of systematic marketing, and secondarily availability of technologies and tools such as GIS and the PLGDB – can facilitate library managers successfully implementing true marketing. Only after steps 1-3 are accomplished, can Step 4

(marketing evaluation) be completed, which identifies whether or not the offer is a success.

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Summary

The purpose of this paper is three fold to: 1) introduce the four steps of systematic marketing; 2) identify the critical nature of customer data required for successful marketing; and 3) introduce a new tool for strategic marketing planning and decision-making at www.geolib.org/PLGDB.cfm.

Yet this contribution in an international forum, within countries' varying levels of availability of population data and technologies, is offered more importantly to acknowledge the critical nature of library customer data for effective planning and decisionmaking. A manager does not need an Internet-based map of customer data to be effective. A manager needs first-hand knowledge of customer market areas and the needs and desires of the actual and potential customers who live there. Technologies only facilitate effective planning—yet can not now or in the future create critical customer data, or strategic use of same. Only a library manager's acumen and willingness to implement systematic marketing can effectively accomplish this.

Library statistics without Fear

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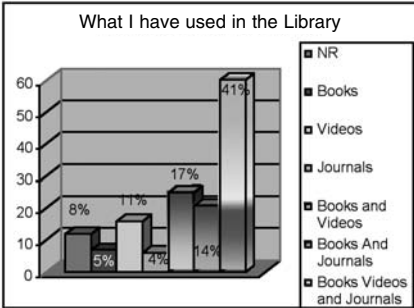
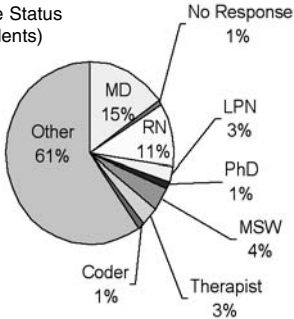
I. Introduction

In today's world, the concept of calculating statistics is still frightening, yet the actual calculating part is now automatic. With programs such as Microsoft Excel or SPSS, the "number crunching" side of statistics is no longer arduous. However, the concepts of statistics are still difficult for some to grasp. Most often, the truly grueling statistical functions are only necessary when an experimental research study has occurred. For most daily functions, the basic statistical functions or descriptive statistics are all that are needed.

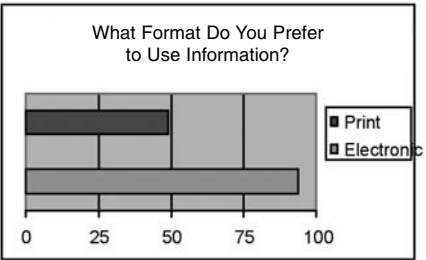
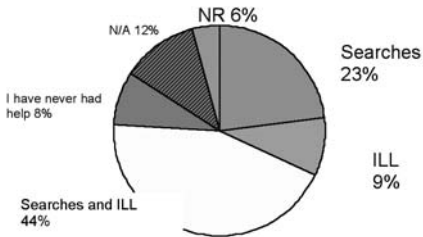
Knowing how what statistics are used is essential for all librarians. They are an important aspect of budget rationales, usage reports, patron trends and other indicators that librarians would use to manage the library. They are required when summarizing results from surveys. They are a vital part of "benchmarking" or comparing from library to library. Research that is reported in library literature or for any professional literature will require an understanding of statistics. Reference librarians should be able to grasp results of professional literature reporting statistics, so that they can guide patrons to the information that they are seeking.

Examples:

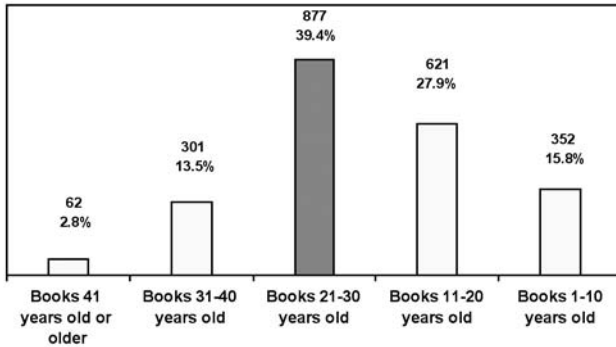
Employee Status (Respondents)



What Services People Use in the Library



Publication date analysis of the 2,226 Public Health Books in the Library: FY 2002/03



II. Concepts of Statistics

Descriptive Statistics: Why use them?

Statistics are facts and figures. The purpose of statistics is to utilize rules and methods, to organize and interpret observations. Generally, there are four types of statistical tests; Descriptive, Parametric test for means and mean differences, Nonparametric tests, and Measures of relationship between two variables. Descriptive statistics is the most well known statistical tests, as they are the foundation of all types of statistics. The purpose of descriptive statistics is to summarize data. They are the best type to use for summarizing surveys, trends in purchasing, trends in usage, and other “non-experimental” data collection that libraries do on a daily basis. Hypotheses are not required! The 4 different types of descriptive statistics tests are: (Gravetter)

1. Frequency Distribution tables and graphs

Frequency tables and graphs are easy to create and give a snapshot of all your observations. The different types of tables and graphs are; the frequency table, the stem and leaf display, a pie chart, line graph, bar graph and histogram.

2. Measures of central tendency

Some of the Measures of central tendency are the mean, median, and the mode. The purpose of the central tendency is to find one number that represents the entire set of data by being a measurement of the most typical score. So the “summary” is one number representing many. This works well with large numbers of data because it can be too complex at times to graph enormous data sets.

3. Measures of variability

The measure of variability is also one number that represents an entire set of data. What it measures is how the data varies from score to score. Standard deviation is an example of a measure of variability. Standard Deviation is the average distance of each score from the mean. Range is another example, it tells you the length of your score set (minimum to maximum score)

4. Z-scores-

The z-score is a measure of each individual score. Where as the Central Tendency is one score that represents many, the purpose of the Z-score is to measure where an individual score lands in a distribution of scores. For example is a score below the mean or above the mean?

Parametric tests for means and mean differences and nonparametric tests are utilized for experimental data, when comparing populations, samples and a hypothesis has

been stated. The term parametric refers to the concept that one is creating parameters or a number which dictates whether your experiment proves or disproves your hypothesis. It is then plausible to infer the results of the experiment from the sample (that you experimented with) to the population that your hypothesis is about. The parameters utilized are; the mean, the standard deviation and z-scores. Nonparametric tests infer results in the same manner; they are just utilizing data that cannot use the mean and other quantitative measurements because the data is non numerical, it is categorical. (You cannot average gender for example). This is known as inferential statistics.

You can use statistics to measure and describe relations. The data for these statistics involve two observations for each individual – one observation for each of the variables being examined. This is known as regression or correlations. Measures of relationships are well known to most. Correlation and regression are easy to calculate and great for “observation” studies. Just remember they do not mean causation.

The biggest problem for most people is to know when to use what. The usage of statistics depends on two factors:

1. What are your variables? How are you measuring them? What are the scales of measurement? The four scales of measurement are nominal, ordinal, interval and ratio.
2. What are you trying to demonstrate? If you are trying to compare two samples of data, z scores might be your route. If you are trying to show the change over time, then a line graph would be a good choice. When trying to get across the “big picture”, choose graphical or tabular statistics. When trying to get a handle on the typical score, or if you are in need to show one score in representation of many, choose central tendency.

III. How to do the statistics

What Are Your Variables?

To choose the statistics you need to know what your variables will be. If you are running an experiment, choosing your variables depends upon your hypothesis. Most often, librarians utilize statistics to demonstrate usage or trends of usage in the past. Statistics are often a rationale for budget increases, weeding collections or other day to day tasks. Quite often a report will be run from the OPAC, or perhaps tallies of what is done will be kept by hand on a piece of paper; in other words data will be collected in some fashion. It will be the librarian’s job to report that information so that action can be taken.

How the data is summarized and reported will be dependent on what type of data it is. As previously mentioned, there are four types of data; nominal, ordinal, interval and ratio. The data types are what dictate the type of statistics utilized. The nominal scale is not actually a scale as one would ordinarily think of one. Actually, data that is nominal, is not numerical, it cannot be “measured”. Nominal scales are just groups of data sorted and categorized. An Example is gender (who is male, who is female). Eye color is another nominal scale. If you work in an academic library, and you keep track of who uses the library, faculty, administrative staff, or students, each of those are categories and this would be known as nominal data. Each category that you utilize to catalog information could be nominal data.

Ordinal scales exist for ranking. In an ordinal scale, items are ranked according to their size or magnitude. The “numbering” that is utilized is not measurable other than with your data. For example most surveys will utilize a Likert scale or the other similar scales, the scale utilized with that system will be an ordinal scale.

Please circle the appropriate response.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Do you feel you have learned from this class?	1	2	3	4	5

The “1, 2, 3,4,5” really means nothing other than that “1” means something lower than “2” the words could very well be used rather than the numbers, they are interchangeable.

Interval scales have no absolute zero, however they do demonstrate magnitude. What does this mean? In the above example, there is no real difference in “distance” between the 1 and the 2. The numbers used could have easily been 1, 3, 5, 7 and 9. Instead, look at the temperature scale. There is a difference between 1? and 2?. In fact the difference is 1?. And that difference is the same as the difference between 2? and 3?. This scale has a zero, you can go below or above the zero. However, we created the zero.

Ratio scales are the scales that are the easiest to measure. They are numerical and measurable. Weight, time, and distance are all ratio scales. If you are keeping track of the number of days an item is allowed to circulate, the number of days would be a variable that would be a ratio scale. The weight of a book is a ratio scale. The number of minutes computers are used for internet searches is a ratio scale.

The importance of your scales is as easy as this: you cannot do numerical calculations to data that is nominal or ordinal. To work with that data, you need to do frequency tables, frequency graphs or the mode. Interval and ratio data can be multiplied, subtracted etc, in other words you can do mathematical calculations with data that is quantitative. You can average the number of searches you do per day!

Presentation of an Entire Distribution

1. Frequency Tables and Graphs

A frequency table is best used when you are trying to present an entire distribution. A frequency distribution is organized tabulation of the number individuals located in each category on the scale of measurement. One column lists the range of scores, from the maximum number to the minimum. The second column lists how many times that score occurs (the frequency).

An Example: Library has a training class. A quiz is given and you want to keep track of the scores. The grade is the best out of 10.

Below are the class grades.

Score 8, 9, 8, 7, 10, 9, 6, 4, 9, 8, 7, 8, 10, 9, 8, 6, 9, 7, 8, 8.

To the right is a tabular representation of the data. It answers many questions such as: 1. What is the lowest score? 2. What is the highest score? 3. What is the most commonly occurring score? 4. Did most of the test takers pass? 5. How many failed? Etc.

X	F
10	2
9	5
8	7
7	3
6	2
5	0
4	1

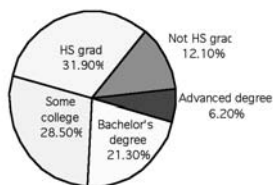
Frequency Graphs

Which graph you use is dependent on the type of data that you collect. If you have collected nominal or ordinal data then the graph should be a bar graph or a pie chart. Interval or ratio data should be a histogram. a.) To create a pie chart, you need to multiply the percentage by 360°

You survey your library patrons to do a “needs assessment”. One of the questions in your survey asks them to tell you their level of education. You would like to offer more education for adults in library services. You need to present this information to the board. One way to display it is to use the pie chart.

Your data is as follows:

- 12.1 % have not graduated from High School
- 31.9 % are High School graduates
- 28.5 % have some college
- 21.3% have a bachelor’s degree
- 6.2% have an advanced degree



To create a pie chart, you convert the percentage into a decimal and multiply it by 360°. Example: 21.3% have bachelor degrees, so $21.3\% = 0.213$. $0.213 \times 360^\circ = 77^\circ$

(Example Modified from Moore 176-177)

b.) To create a bar graph, you would be working with nominal or ordinal data. The height of each bar represents the number of times that category occurred, or the frequency. It can be easier to draw than a pie chart, and can be better to use when comparing items. Pie charts have to equal 100%, whereas bar graphs, if you add up the columns do not have to be part of a whole (or be equal to 100%). The vertical axis should be the frequency (either a count or a percentage is fine) and the horizontal axis should be the categories. In bar graphs, the bars do not touch.

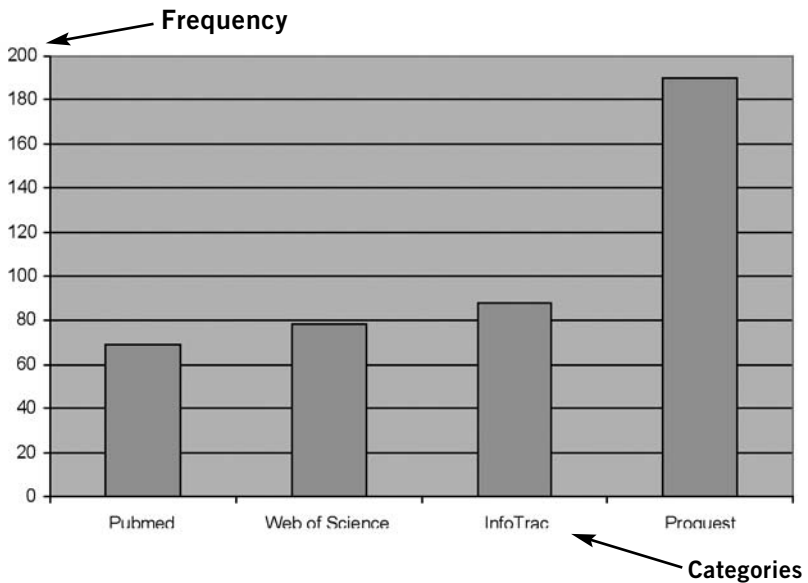
Example:

You are tracking what databases your users utilize in your library – below is your data:

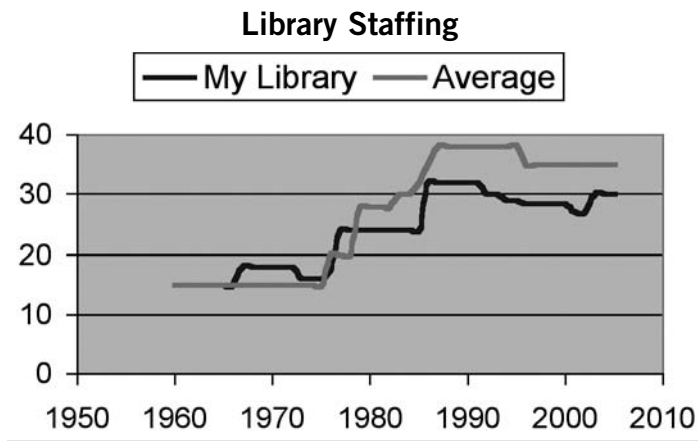
PubMed 69 (Medical Database) InfoTrac 88 (General Academic)

Web of Science 78 (Science Database) Proquest 190 (General Academic)

** Each database is part of the whole for the specific discipline they cover.

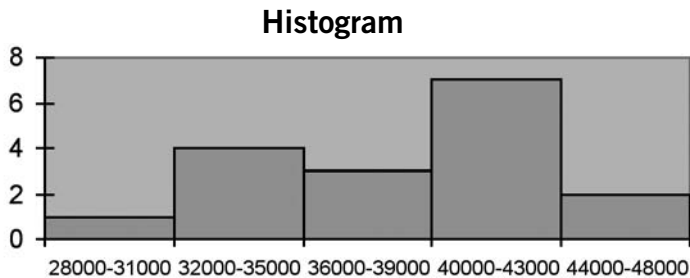


c.) A line graph is used mainly to demonstrate change over time. One axis is the measure of change, the other axis is time. Example: You have done a survey of the number of staff in your library. You are comparing it to benchmark data, which demonstrates the average of staff through the years.



d.) Histogram-

Histograms are used when your data is interval or ratio (numerical). Again, they are a frequency graph, and one axis is the frequency (or percentage). Unlike in a bar graph, the histogram bars do touch. Think of using a histogram when you are using central tendency numbers as well. It will give you the big picture plus the central number. For example, you survey your area for household salaries. The following histogram displays your results:



e) Stem and Leaf Display

Stem and leaf displays are another graphical representation. You use this for numerical data. You can use a stemplot when you have small data sets. It's easier to draw than a histogram, and gives you actual values. It gives the same information. To make one

1. Separate each observation into a stem consisting of all but the final most digit and a leaf is the final digit. Stems may have many digits but each leaf contains only a single digit.
2. Write the stems in a vertical column with the smallest at the top and draw a vertical line at the right of this column write each leaf in the row to the right of its stem in increasing order from the stem.

Example:

Data	Stem and Leaf Display
83 82 63	3 23
62 93 78	4 26
71 68 33	5 2679
76 52 97	6 238
85 42 46	7 1344668
32 57 59	8 1235
56 73 74	9 37
74 81 56	

2. Central Tendency

Trying to decide between mean, median and mode can be difficult. They are all basically defined as the center number, representing the entire distribution.

You utilize the mean for numerical data (scales of measurement that are ratio or interval) and for distributions that are normal. Your data has to be numerical, considering the mean (or average) is a sum of all the scores divided by N or the number of scores.

- For a population of N=4 scores, 3,7,4,6

$$\text{Mean} = \bar{X} = \frac{\sum X}{N} \quad \text{a} \quad 3+7+6+4 = 20 \quad \text{a} \quad 20/4 = 5$$
- A group of six students decide to earn some extra money one weekend picking vegetables at a local farm. At the end of the weekend the students discovered

that their average income was $\bar{X} = \$30$. If they decide to pool their money for a party how much will they have?

You don't know how much money each student earned. But you do know that the mean is \$30. This is the amount that each student would have if the total were divided equally. For each of six students to have \$30 you must start with $6 \times \$30 = \180 . The total, $\sum X = \$180$

To check this answer, use the formula for the mean:

$$\bar{X} = \frac{\sum X}{N} = \frac{\$180}{6} = \$30$$

(Examples taken from Graveteer)

When data is categorical (nominal or ordinal) you should use the mode. The mode is the category with the highest frequency. Do not make the mistake that most make, and state that the mode is equal to the frequency. The mode must be the category. Utilizing our example our example from I.b.(the bar graph on the databases that are used the most by our users) the Mode in this example is Proquest because that is the database with the highest frequency.

- Suppose for example you ask a sample of 100 students on campus to name their favorite restaurants in town.

What is the mode? Luigi's
Because Luigi's has the most students who claimed it was their favorite (42)

Restaurant	Frequency
College Grill	5
George & Harry's	16
Luigi's	42
Oasis Diner	18
Roxbury Inn	7
Sutters Mill	12

What is the Median? The median is the middle score. You utilize the median when you have numerical data and the distribution is skewed. Or, you utilize the median when you have ordinal data (a type of categorical data). The median is most often used when the data is skewed. Example: You work in a public library that has a mostly poor population. Yet, in a survey that you have mailed out, you request to know the salary range of your constituents. There might be one area, which is very wealthy, but the majority of the population is not. Your survey results are as follows:

35,000	37,500	100,000	30,675	31,003
35,000	36,400	100,000	37,251	
28,000	40,850	85,000	36,223	
40,000	29,750	33,750	35,313	
80,000	30,605	33,750	33,113	

The average or mean would be \$45,199, yet the median would be \$35,000. That is a substantial difference. However, if I was to remove the data that is out of the ordinary (the 80-100,000) then my average would be \$34,364 and my median would be \$35,000. How did I calculate that? To get the mean I added all the salaries and divided them by 21 (there are 21 scores).

To get the median I put all the numbers in order from lowest to highest and counted 10 from each side.

28,000	33,113	35,313	40,000	100,000
29,750	33,750	36,223	40,850	
30,605	33,750	36,400	80,000	
30,675	35,000	37,251	85,000	
31,003	35,000	37,500	100,000	

Those 4 salaries that stand out are known as outliers. They are data that stand away from the norm. If your distribution is skewed like this, you would choose to utilize the median.

- Consider the following: 3, 5, 8, 10, 11. $N = 5$ scores.
And the middle score is $X=8$. So the median is equal to 8.0
- 3,3,4,5,7,8 Now select the middle score (4 and 5) add them and divide them by 2 = $9/4 = 4.5$

3. Measures of Variability: Standard Deviation

Standard deviation is the most commonly used and the most important measure of variability. Standard deviation uses the mean of the distribution as a reference point and measures variability by considering the distance between each score and the mean. It determines whether the scores are generally near or far from the mean. That is, are the score clustered together, or scattered? In simple terms the standard deviation approximates the standard distance from the mean.

Although the concept of standard deviation is straightforward, the actual equations will appear complex.

Scores: 10,7,6,10,6,15 Find the variance and the standard deviation

What did we say was the formula for variance?

Compute the Sum of squares for SS we will use the definitional formula

$$SS = \sum (X - \bar{X})^2$$

Step 1: Calculate the Sample mean $\bar{X} = \text{Sum of } X/n = 54/6 = 9$ $\bar{X} = 9$

Step 2: Compute the deviation scores $(X - \bar{X})$ for every ex value

X	X - Xbar	=
10	10-9	1
7	7-9	2
6	6-9	-3
10	10-9	1
6	6-9	-3
15	15-9	6

Step 3:

X	X - Xbar	=	(X-Xbar) ²
10	10-9	1	1
7	7-9	2	4
6	6-9	-3	9
10	10-9	1	1
6	6-9	-3	9
15	15-9	6	36

Step 4:

Sum the squared deviation scores to obtain the value for SS

$$SS = \text{Sum}(X - \bar{X})^2 = 1 + 4 + 9 + 1 + 9 + 36 = 60$$

$$\text{Compute the sample variance } s^2 = \frac{SS}{n-1} = \frac{60}{5} = 12$$

Step 5:

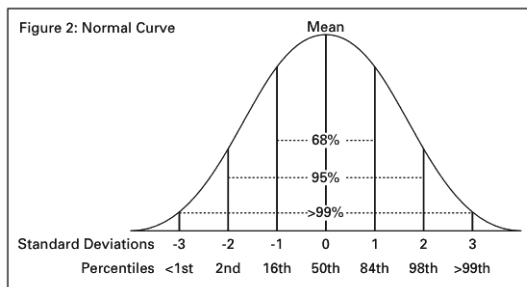
Compute the sample standard deviation $SD = \sqrt{ss/n-1}$ = Square root of 12=3.46

How is this useful in the library? Let's go back to our example of the average age of a book in the library. The average age of the books in that example is somewhere between 21 and 30. Let's choose the number 23. If the mean is 23, and there is a SD of 10 years where does that leave us? That would mean that the majority of our data would have to be with 1 standard deviation or with 10 years (+/-) of 23 (13 or 33 years old). If the standard deviation is 5 years, then the data would look totally different. Looking at that chart, that tells us that this is the case. How the data varies around the mean makes a big difference.

Let's look at the example talking about salaries. If we include the outliers our Mean is 45,199 with a standard deviation of 20,791 and if we don't include the outliers our Mean is 34,364 with a standard deviation of 4932. The dropping of the outliers demonstrates that without them, the data is extremely close. The standard deviation shows that the data does not vary much from the mean. Including the outliers causes the SD (Standard deviation) to jump up in size, because the data varies much more.

4. Z Scores

Z scores describe one individual score within a set of data. They consist of a sign and a number. The sign (+/-) tells you whether the score is above or below the mean. The numerical part indicates how many standard deviations away from the mean your score is located. It is an excellent choice for comparing individual scores. Let us look at our staffing example again. For the year 2005, the average number of



staff in libraries similar to ours was 35. Our Library had a staff size of 30 people. Is that a tremendously large difference? It is if the standard deviation is 2 people. $Z = (x - \bar{x})/SD = (35-30)/2 = 5/2 = 2.5$. This means our score is less than the mean, and 2.5 standard deviations away from

the mean. If most of your data in a normal curves lies within 1 standard deviation, this makes for a large difference.

Taken from http://www.afb.org/images/celeb_sol-figure2.gif

If our sister school has 34 staff members, that makes their z score $-.5$ and they are not even one standard deviation away from the mean. Some people look at z scores as if they are a conversion to a standard deviation score. Now let's compare to another department in your institution. Perhaps HR. The average number of employees in benchmark data for HR is 48. Your HR department has 38 with a standard deviation of 8. Who has a lower "deficit"? HR's Z score is $(38-48)/8 = -10/8 = -1.25$. The library has a more significant staffing issue!

Using Excel to calculate your statistics.

You have several options on how to utilize Excel for your statistics.

1. To create charts click on the chart button located on the tool bar. There is a four-step wizard that will walk you through the process. Some tips for create charts are:

- Once a chart is created, you can always double click on an element of the chart (a column, point or axis) and change the item after it is created.
- When making a line graph, utilize the XY scatterplot vs. the line.
- Make sure you let the wizard know if your data is organized into columns or rows.

2. To create a Histogram or utilize other packages that excel has pre-packaged for you, you can use the data analysis option. It is located in the tools menu. However, if you do not see it at first you will have to install it (a one time thing). To install it, select Tools, Add-ins and choose Analysis Tool Pak by click on the box to the left of it (a check mark will appear)

3. Utilize the paste function.

The button for the paste function is located on your toolbars-

Once you choose this button you have access to a variety of functions.

To do the mean, look under average. Correlation is correl etc.

Tips:

- The histogram has a "bin" option. That is the intervals that you set up for your data. In the example listed above for histogram, 28-31000 is an interval. If you don't put a bin in, then excel will. I find it easier to leave it blank and let excel decide the bin. Then I go into the bin and change it.
- The histogram in excel, appears without the bars touching it (really!). To fix that simply double click on the series (the vertical bars) and click on the options tab. Look for overlap and gap. Change gap to 0. Then you have a correct histogram.

- Descriptive statistics in the data analysis option is your best choice for most of the statistical work you need to do. It gives you all of your central tendency, your minimum and maximum score and more.
- For Correlation and regression graphs, use the scatter plot chart. To calculate r utilize the paste function option and go to correl.

Statistically Significant.

Statistically significance is based on a value of probability. What is the probability that the answer you give will be wrong? That is the “layman’s” definition of it. Statistical significance has to do with hypothesis testing. When you test something you say either the null hypothesis is true (nothing happens) or the null hypothesis is not true (meaning some change has taken effect). Think of it in a doctor-patient setting. Does aspirin cure a headache? The null hypothesis is no, it does not (no change occurs). If you say the null hypothesis is not true (called rejecting the null hypothesis) then aspirin does work (change has occurred due to your intervention). By mistake, you can reject the null hypothesis, even though it is true! Maybe, aspirin has no effect, but everyone taking the aspirin automatically relaxed and the headache went away. Maybe the results were recorded wrong. For whatever ever reason, you reject the null hypothesis (you state that change occurred) when actually the answer should have been null. What are the chances of that? If you say that you have a 90% chance making that mistake, then your experiment is not statistically significant! If you lower that to 10%, it will have a greater degree of significance. 5% and 1% are the most widely used significance levels. They have not the best degree, but some of the highest degrees of significance. Statistical significance in symbolic form is known as alpha or α . So using the symbolic form, $\alpha = .01$ or $.05$ ($.01 = 1\%$).

The question most people have is where does the alpha come from? In school, alpha is always given to you. In the real world, the person conducting the study chooses the alpha. You of course would want to select a good alpha, so 90% would be out of the question. I like to choose my alpha based on my sample, if I have a really large sample, $.05$ is ok, smaller samples should have a $.01$.

Reading Statistical Literature

Try to keep in mind, that not everybody using statistics really understands it. I always look for the statistical significance, the variables and the size of the sample. I do that for a variety of reasons. If the statistical significance is not outstanding, I become extremely critical. If the sample is too small, then I may look at this like it is preliminary trial of research on a topic, but I won’t look at the study as if it is the end all be all. I also looks to see what type of data they collected (are my variables categorical or numerical). Then I read the study. What is the format of the paper

I am reading? Is it in a structured format? If not, it will make deciphering information very difficult. I then look at the study. When considering polls, surveys et, I consider the following points: (1997 Moore.)

1. What was the population? Do they say?
2. What type of experiment, survey, study etc. did they use?
3. What was the intervention (independent variable)?
4. Do you really think that the variables will demonstrate the theory?
5. How were the subjects chosen?
6. How did they decide that the intervention worked?

Some information about Polls Online/ Online Polls

Mr. Poll www.Mrpoll.com

Current Population Survey: <http://www.bls.gov/cps/>

Gallup Poll. www.gallup.com/poll

Graphs and Charts:

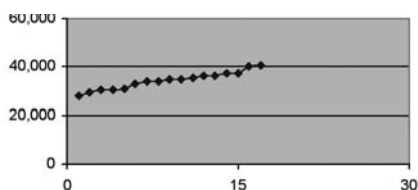
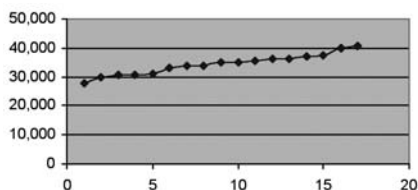
1. Are they labeled properly?
2. Are they scaled properly?
3. State what units you used.
4. What is the source of the data?
5. Are the wedges, bars etc the right size?
6. Look for patterns.

Furthermore, I look for the data. You should be able to replicate their charts and statistical representations based on the data that they provide. Knowing that the data is included, it easy for you to draw your own conclusions before you read theirs. Don't let an author bias your own reading capabilities. Know the difference between categorical data and numerical data. Consider what could have biased the researcher or their results. What errors could have changed the answers? Always question the methods that they used. Be wary of correlational studies as they only indicate that a relationship has occurred. They do not tell you cause and effect. Take note of overall trends, data sources and patterns.

Making statistics work for you.

Remember to label everything and to state your source of data. But if you are utilizing statistics for your advantage (fighting for more money, more staff) then consider the following tactics.

1. Try to utilize graphs, bar graphs, line graphs, and histograms, something people can see easily. It works to your advantage to use fewer words!
2. Don't have too many categories in your bar graphs; if your survey has many just highlight the top 5.
3. Try to utilize color, be sure not to make pastel, and if you need something to stand out make that item the brightest color.
4. Change intervals in axis to make your charts stand out more. See example below.



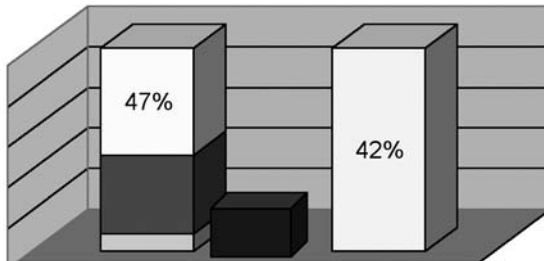
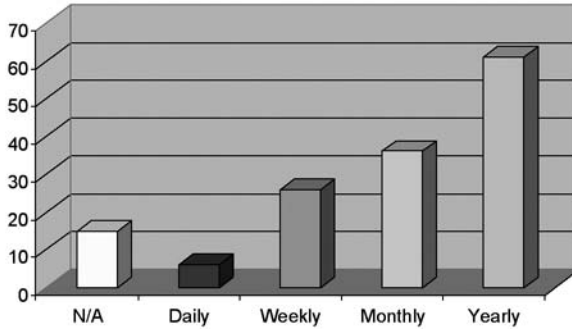
5. Be careful when creating questions in surveys. Example: How often do you go to the library? Most people will not answer daily! But if your choices are :
 - a. daily
 - b. weekly
 - c. monthly
 - d. yearly
 most people will choose monthly- it would be better to have
 - a. daily
 - b. once a week
 - c. every other week
 - d. monthly
 - e. every other month
 - f. yearly
 - g. not at all

You need to be careful how you word things. However if you have done something such as daily weekly monthly yearly not at all, and you want to show that the library is utilized, try combining the daily, weekly and monthly numbers. See below:

If Yes How Often Have you used the Library

Daily	Weekly	Monthly	Yearly	N/A	
6	26	36	61	15	144
4%	18%	25%	42%	10%	100%

How Often Do You Use the Library



How Often Do You Use the Library?

6. Know your audience.
7. Benchmark! Comparisons to other libraries not only help you learn what you need and don't need, but they also help your audience.

Conclusion

In conclusion, most of us for our day to day use of statistics can utilize the fundamentals or basic statistic option. Once you understand the theory behind the basic statistic, you can simply utilize a software package to do the math! The most important things to keep in mind is what you are trying to do with the data and what type of data do you have. Try to use your descriptive statistics to make the work you do in your library stand out. Working with more complicated statistics such as inferential can be difficult and you should try to avoid that unless you have a strong understanding of statistics. However, many librarians are daunted by statistics because they feel they cannot do math. The more statistics is utilized as an application, the more you understand them. To understand more about statistics,

a class is always an excellent idea. Statistics are always offered in library schools, however any school that offers behavioral science courses will have a statistics course as well and this meshes very well with library science.

Glossary: *Many of these definitions are taken directly from the texts (electronic and paper format) that are mentioned in the bibliography. I simply searched for the clearest definition.*

Central Tendency:

A statistical measure that identifies a single score as a representative for an entire distribution. The goal is to find the single score that is most typical or most representative of the entire group.

Control Group:

Is a condition of the independent variable that does not receive the experimental treatment. The control group is the baseline for comparison with the experimental group.

Dependent Variable:

Is one that is observed for changes in order to assess the effect of the treatment.

Hypothesis Testing:

Hypothesis Testing is an inferential procedure that uses sample data to evaluate the credibility of a hypothesis about a population.

Independent Variable:

The variable that is manipulated or controlled by the researcher.

Inferential statistics consist of techniques that allow us to study sample and then make generalizations about the populations from which they were selected.

Level of Confidence: The level of confidence says what percent of all possible samples satisfy the margin of error.

Margin of Error: The margin of error says how close the sample statistic lies to the population parameter.

The mean is the most commonly used measure. It is the central number of a normal distribution. It is equaled to the sum of all the scores divided by the number of scores.

The Median: exactly 50% have values less than equal to 50th percentile.

The mode is the score with the greatest frequency. The mode is used when the scores consist of measurements on a nominal scale.

N is the number of scores in a data set (number of observations ...etc)

The range is the distance from the lowest to the highest score in a data set. The range is the difference between the upper real limit for the largest X Value and the lower real limit of the smallest.

Raw score:

Is an original measurement or observed value.

p-value

The p-value represents the probability of error that is involved in accepting our observed result as valid, that is, as “representative of the population.” For example, a p-value of .05 (i.e., 1/20) indicates that there is a 5% probability that the relation between the variables found in our sample is a “fluke.”

Parameter:

Is a value, usually numeric, that describes a population.

Population:

The entire group of individuals that a researcher wishes to study.

Probability

In a situation where several different outcomes are possible we define probability for any particular outcome as a fraction or a proportion.

The probability of Event A = $\frac{\text{\# of outcomes classified}}{\text{Total number of outcomes}}$

Or , for a clinical setting = $\frac{\text{\# of times the outcome occurs}}{\text{\# trials}}$

Sample:

Is a set of individuals selected from the population, usually intended to represent the population in a study.

Sampling error is the discrepancy or amount of error, between a sample statistic, and its corresponding population parameter.

Sigma is a Greek letter and it stands for sum. (Summation)

The Standard Deviation is a measurement of the standard distance from the mean.

Statistics: are facts and figures.

Statistically Significant – Findings are said to be statistically significant when the null hypothesis has been rejected. In other words the findings were not due to chance, the intervention/treatment is the cause of the results.

Type 1 Errors:

It is possible to reject the null hypothesis when in reality the treatment has no effect. The outcome of the experiment could be different from what H_0 predicted just by chance. This is a type 1 error. A Type 1 Error consists of rejecting the null hypothesis when H_0 is actually true.

Type 2 Errors:

A Type 2 Error the investigator fails to reject a null hypothesis that is really false.

Variability: describes how spread out the values of the sample statistic are when we take many samples. Large variability means that the result of sampling is not repeatable

Variance: Is the mean squared deviation

Z scores: The sign of a z score indicates whether it is above or below the mean. The numerical value of the z score. The numerical value of the z-score indicates how many standard deviations are between the score and the mean.

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Abstract

Many librarians who don't have a mathematical or statistical background are often intimidated by a wide spectrum of statistics. A basic understanding of statistics would help librarians answer reference inquiries; write successful proposals for funding of libraries, and to conduct research. This paper will address the following topics: (1) what are basic descriptive statistical methods and how they can be utilized; (2) how to understand "statistically significant" and how to make statistics work using graphs and charts; and (3) how to understand, interpret, and utilize statistics and a variety of the professional research literature to help manage your library.

Statistics To Plan: Statistical Development in a Regional System of Public Libraries (Valencian Community – Spain)

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For the Department of Books and Libraries of the Valencian Autonomous Government, the year 2000 was the starting point of a new strategy of library policy¹, that incorporated, inter alia, the following objectives: a reliable knowledge of the public library system of the Valencian Community, the establishment of a regional library electronic network, the approval of new grants for the public libraries, the legal adaptation of the library system and the creation of new aid instruments for the libraries and its professional staff (on-line bibliographies, Web page at regional level and Portal of Valencian Libraries, distribution list of information, databases of the Valencian Library System, etc.). The entire programme begun with the preparation of the Map of Public Reading of the Valencian Community and the improvement of the statistical system of the Valencian Library System which has allowed having a better knowledge of the

current state of the regional library network and that acts as a tool for the making of decisions in library policy. This paper analyzes the progress made in statistical management and its practical applications in the adoption of planning strategies and in research on public libraries.

Valencian Library System

The Valencian Community is a Spanish autonomy with capital in the city of Valencia. Valencia has 4.600.000 inhabitants and 542 towns integrated in 3 provinces (Alicante, Castellón and Valencia). Although the Valencian Library System was created in 1987 by the law 10/1986 relating to the Library Organization of the Valencian Community http://www.cult.gva.es/dglb/bibliotecas-f_e.htm (inscription of Valencian Library legislation), its beginnings go back to 1983, when the Spanish Central Government transfers the powers regarding libraries to the Valencian Autonomous Community, within the framework of political and administrative decentralisation made possible by the Spanish Constitution of 1978. Since then, the Valencian Library System has been characterized by a policy of establishing libraries in many towns that lacked a public library service, as well as the extension of the urban library networks in large and medium-sized towns. By 31 December 2004, there were 532 centres of public reading in the Valencian Community including provincial public libraries, municipal public libraries, branch libraries, etc. 98'3% of the Valencian population live in towns that have public library service and all the towns of more than 3.000 inhabitants (except one) have public library. 98% of the public libraries belong to the local administration.

Reasons for an improvement of the statistical system

Despite the rapid expansion of the public library system throughout the Valencian Community, there are certain deficiencies that adversely affected (and still do) the Valencian libraries: chronic lack of suitable budgets, lack of professionals in the libraries of small towns, small size of many of the libraries, lack of renewal of the bibliographical resources, reduced timetable for attending the public in small towns, lack of library service in the towns with less demography, limited presence of mobile libraries, lack of computerisation in an important number of libraries, lack of legal adjustment of the system to the new conditions and functions of the libraries in the Information Society, etc.

The autonomous institution of library policy was partially aware of the deficiencies of the library system, but the extent of the problems and shortcomings as well as their geographic distribution were not exactly known. The need to create instruments that could help in the understanding of the real situation of libraries in order to draw up a corresponding policy was soon evident.

One of the first measures for obtaining an accurate knowledge of the situation was the Map of Valencian Public Reading² drawn up between year 2000 and 2001. This Map analyzed all the parameters of use, services, facilities, personnel and expenditure that affected the Valencian public libraries through on-the-spot surveys in each of the libraries. The Map of Valencian Public Reading meant the creation of a powerful database that also provided an improvement in the whole statistical system of the Valencian Community that since its creation it was simply limited to the monthly compilation of certain data: visitors, loans, registered users and total number of resources. In addition, the Library Inspection Service was set up in November 2000 as an instrument of control and knowledge of the library system.

The Map of Valencian Public Reading confirmed the absence of computerisation in many libraries. Thus, the first measure that to be implemented, thanks to a better knowledge of the state of affairs in libraries, was the creation of the Valencian Public Reading Electronic Network³ on 18 September 2001 which currently integrates 223 libraries (<http://xlp.v.cult.gva.es/>). The second measure was the change of orientation in the grant policy for the purchase of basic library resources, giving priority to the purchases for diversification of the bibliographical supply (fiction, juvenile literature, essay...) rather than to a subsidized purchase that was previously very much directed towards reference works (encyclopedias), particularly in small towns.

The current situation of libraries unveiled the need of a progressive improvement in the entire statistical system. From the very beginning, it was also decided that the whole statistical process (dispatch of questionnaires, creation of tools, tabbing and use of data, verification of data, supply of statistical information) should be kept in the hands of the officials of the Department of the Books and Libraries, without outsourcing it, so that our Department was in control of the full process.

Creation of XABIB: database of the Valencian Library System

All the changes projected to improve the Valencian statistical system made necessary the creation of a powerful database that centralised all the quantitative -and sometimes qualitative- information, of the Valencian libraries. In this context and thanks to the collaboration between the librarians and computer technicians⁴, the database XABIB⁵, was set up in the year 2000. XABIB becomes the central and "hard" core of all the subsequent computer developments related to library statistics.

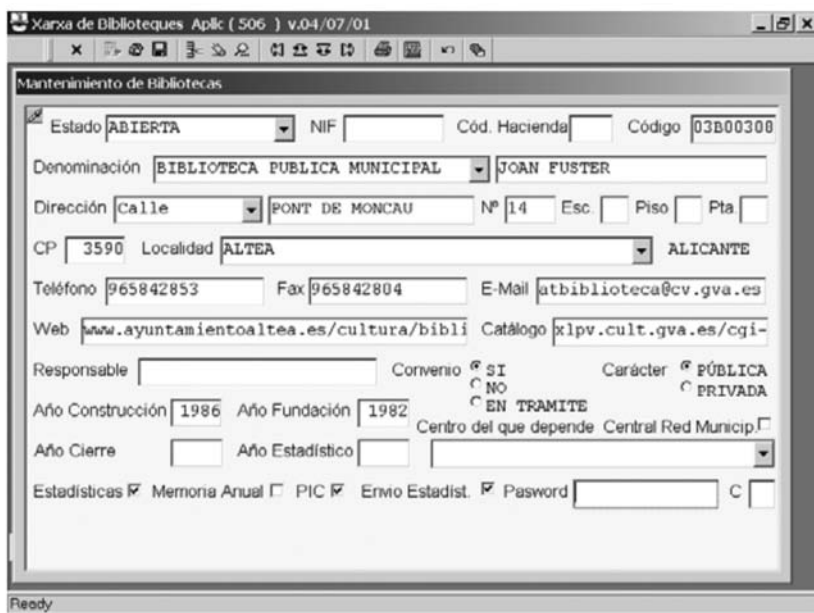
XABIB is a database developed in Database Oracle9i that has the PowerBuilder Release 7 as the development tool for the application. It is an application client-server in which the users of maintenance and processing have typical Windows 98

and Windows 2000 posts integrated in a network managed by Windows 2000. Furthermore, the database is connected through common tables with other databases of the Culture Department of the Valencian Government. It is perhaps a somewhat complex tool for the data entry, but it is very powerful with respect to the large storage capacity of information and the enormous possibilities about data processing and development of Web applications.

XABIB adopts a tree structure, organized in displayable menus under the following sections:

- Maintenance: it contains the directory of libraries that includes data on location: address, telephone, fax, e-mail, person responsible, Web page ...
- Observations: it stores qualitative information entered by the Library Inspection Service.
- Annual data: it includes all the data yearly requested by the institutions of the Department of Culture, Education and Sport, such as the Culture Ministry, the National Statistical Institute and the Valencian Statistical Institute. It also includes all the parameters that can be of interest for the Department of the Books and Libraries. These data are the ones referring to personnel, collection, loans, movements, users, registred users, activities, expenditure, timetables, automatization, Internet service, services and facilities, documentary products, periodic publications ...
- Monthly data: it collects the data provided by the historical series of monthly statistics on visitors and loans according to language. In a second option, the data on loans of special material are introduced (periodic publications, voice, audiovisual and electronic documents).
- Lists: it is an option that permits the standardized printing of labels and lists with the synthesized addresses of the libraries (code, name, town or city).
- Local aid: it gathers information on all the grants and aid that the autonomous government has granted since 1984 to the city councils for the maintenance of their libraries.

The statistical applications mentioned in this paper will come out from this central core. In addition to the computer copies, there is also a paper file of the annual and monthly statistics that are archived with the corresponding name and area of the library following a chronological and alphabetical order. These folders are kept in boxes that are passed on to the management records and afterwards to the intermediate archives.



Picture 1 Screen of the database XABIB. Page of maintenance

Update and check of the directory of Valencian libraries

Once the database XABIB was created, subsequent efforts were focused on the update of the directory of all the Valencian libraries: public libraries, university libraries, specialized libraries, private libraries, documentation centres, libraries in hospitals and prisons, etc. This update and check of data was made through on-the-spot surveys of the Map of Valencian Public Reading as well as by telephone contacts with all the city councils. The result of these efforts was the disclosure of an unknown number of libraries as well as the information about libraries that were closed. The directory of Valencian libraries continues being updated on a daily basis and on-line and, furthermore, every year, a copy of the existing data of the directory of each library (address, e-mail, telephone, Web, library) is sent for its check and correction by the libraries integrated in the directory. When the annual questionnaire is sent, the responsible of the libraries are informed that they should communicate any change produced over the year in its directory to the Department of the Books and Libraries. When new data are introduced, priority is given to data entailing a change in the directory, because this information can be

consulted on-line via Web, and the citizen should receive the most reliable and updated information.

Integration of information into the Spanish statistical system of public libraries

In 2001, in parallel with the process of improvement in statistical management, the Valencian Community joined the Group of Statistics of Public Libraries. This group has a national dimension and was created in 1997⁶, thanks to the cooperation between the Spanish Ministry of Culture and the institutions in charge of library policies of the different Spanish regions. The group has worked satisfactorily and has secured, in the short term, reliable statistics of the whole Spanish public library system based, firstly, on the Regulation ISO 2789:1991 and, currently, on ISO 2789:2003. This Working Group has managed to have an annual picture of the state of the public library system in Spain that allows the comparative study at a national and international level. At present, the Valencian Library System provides its statistical data of the province and of the Autonomous Community to the Spanish Group of Statistics of Public Libraries and collaborates in the design of questionnaires and the completion of new aims (preparation of indicators, etc.).

Update of statistical questionnaires: monthly statistics and the annual questionnaire

The Valencian Community collects a historical series of monthly statistics based on data related to visitors, loans, registred users and total number of books and documents of the Valencian public libraries. In 2001, the questionnaire of monthly statistics was updated in order to enable the inclusion of the loans of special material as well as the loans in foreign languages. Furthermore, certain monthly data were no longer requested, as they were already collected in the annual statistical questionnaire. Therefore, these statistics now reflect only the monthly movement of visitors and loans.

However, monthly statistics did not provide an overall picture of the Valencian Library System since there were great many issues that were not addressed: personnel, expenditure, services, facilities, etc. It was necessary to further increase the knowledge of the real situation of the Valencian libraries. Hence, in 2001 a new type of annual survey addressed at the public libraries was drawn up. This new annual survey collects all the parameters applicable to libraries in order to carry out a more rigorous statistical analysis of the Valencian Library System. At the beginning, the survey was only intended for the public libraries, but it was also applied to another type of libraries (specialised, private, libraries in hospitals and prisons...). At present, it is only sent to public libraries.

This annual survey was used for the first time in the collection of data of the year 2000 and is elaborated in a way that enables the delivery of statistical data requested by the Ministry of Culture, the National Statistical Institute and the Valencian Statistical Institute, as well as parameters of interest for the Department of Books and Libraries of the Valencian Autonomous Government. The survey is reviewed annually according to criteria adopted by the Spanish Working Group of Statistics of Public Libraries in compliance with the Regulation ISO 2789:2003. Therefore, from the first survey elaborated in the year 2000 until the present time, changes have been made with the intention of standardising and controlling the most significant parameters at library level.

Simplification of the sending procedure of statistics

In order to increase the collaboration of the Valencian libraries in the execution and sending of statistics, there was an attempt to simplify the process of the sending of monthly statistics. Until 2001, the delivery of the historical series of monthly statistics was made only by postal mail. From 2001, new electronic models of statistics were made and the sending of statistics via electronic mail was also permitted. In 2002 a new model to send monthly statistics was established, based on the introduction of the monthly statistics in XABIB directly by the libraries, via the Internet. It is the fastest and simplest way of data transmission for the libraries. Those responsible for the libraries go to the page of the Library section of the Department of the Book and Libraries http://www.cult.gva.es/dglib/bibliotecas-f_e.htm (item: "monthly Statistics") and using the code of the centre and the access key, can introduce the statistical data and keep a printed copy.

In the case of the annual surveys and due to the complexity in data entry, the dispatch of statistics is only made through postal or electronic mail. It is not possible for the librarian to introduce the data directly in XABIB. The data coming from annual statistics are directly introduced by the personnel of the Department of Books and Libraries.

Improvements in the consistency of data: process of filtering and checking of data

One of the most difficult tasks at a statistical level is obtaining the greatest level of consistency and coherence in the data. In the case of monthly statistics, the simplicity of the requested data and the historical nature of the series has made it possible to achieve a considerable level of consistency of the data. The time factor is often one of the best recipes for obtaining a greater coherence in the supply of information, because professionals are improving the ways of compiling and providing the information required. However, monthly statistics are also subject to a data filtering process before their final entry in XABIB, even in cases where statistics are introduced by librarians.

As explained before, the series of annual statistics are more recent (data exist since the year 2000) and comprises a greater amount and complexity of parameters. Thus, in this type of statistics, since 2001 (when the registration of this type of data began), a special effort of filtering and checking of data has been undertaken. Efforts have been made to rectify all the possible errors and the lack of data by many telephone calls or via fax, postal or electronic mail. In this context, time has also been an important ally and, over the years, a clear improvement in the coherence and the volume of the data provided by the libraries has been perceived. On the other hand, efforts have been made to make the questionnaire as clear as possible. The experience of each year and the identification of recurring errors when analysing out statistics have resulted in the inclusion of new explanatory notes or "aids" in the questionnaire, in order to guide the librarians and secure a greater reliability in the statistical data. The current policy consists in amending the questionnaire as little as possible and in continuing to offer better consistency levels.

Creation of the on-line Directory of Valencian Libraries

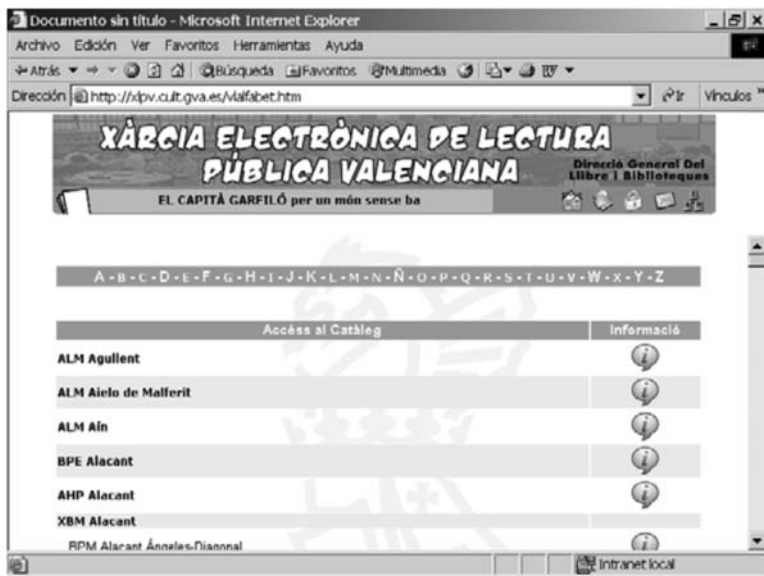
The Department of Books and Libraries has always considered that the computer tools created for the internal management of the work might have a Web application which allowed part of the work to be published openly. Thus, in 2002 the Web version of XABIB was created as well as the external database of the Valencian Library System. This Web application allows the open, versatile and on-line consultation of the principal data of the Valencian Library System through the Web http://www.cult.gva.es/dglb/bibliotecas-f_e.htm (inscription XABIB). The database allows researching information according to typology of libraries, town, region, provinces, number of inhabitants, etc. The result is a list of libraries that answers to the search criteria used, with its basic data of the directory: name, library typology, postal address, electronic address, telephone, etc. By clicking in each reference, one has access to an index card of the library centre with the timetable of the library and to another index card with the services and facilities of the library. The users of this application may also obtain labels with a standardized format with the addresses of the Valencian libraries. They can also enter the Web pages of the selected libraries as well as their catalogues. This Web application of XABIB is also integrated in the interface of the Electronic Network of Valencian Public Reading (<http://xlpv.cult.gva.es/>), which is connected with any catalogue of the libraries within the network. In this way, when a specific book in the catalogue of one of the libraries is found, one can also consult the address, the electronic mail or the timetable of the chosen library.



Picture 2



Picture 3. Screens of free access web pages of the Valencian Library Directory (XABIB).



Picture 4. XABIB web application is also integrated in the interface of the Electronic Network of Valencian Public. Reding connecting catalogues with data of the libraries directory.

Programme for obtaining statistical information of internal use

A programme for obtaining statistical information for the development of data stored in XABIB was set up. It was based on an already existing tool developed by the Valencian Government of design of forms in Internet called the HDFI. It is a very complete programme and with full possibilities of development since it extracts the information in Excel format from very open consultations of the data introduced in XABIB. The interface divides the consultation of data into 21 sections: library centres, users, loans, registred users, inter-library loan, library surface, time-tables, periodic publications, activities, automatisation, Internet and Web, collection, bibliographical movement, services, facilities, expenditure, staff, documentary products, aid to towns, mobile and temporary libraries along with monthly statistics. All these sections can be restricted by year, by geographic distribution (provinces, county, towns), by demographic magnitude and other criteria. Getting the information in Excel tables permits huge versatility in working with the statistical information and makes the supply of the data requested by the different institutions very easy. This programme is for the internal use of the department.



Picture 5. Online statistical data search screen in the Dynamic Map of Libraries. To the left, search criteria: Centers, users, loans, members, activities, expenditure, personnel, database, etc.

2005: The Dynamic Map of Valencian Libraries

In the same way as was done with the directory of Valencian libraries (XABIB), the Department of Books and Libraries has also been working in order to have an open and web version of the programme. Therefore, in June 2005 the Dynamic Map of Valencian Libraries on the Web was created on the following page: http://www.cult.gva.es/dglb/bibliotecas-f_e.htm (inscription "Mapa Dinámico de Bibliotecas Valencianas"). The Dynamic Map of Valencian Libraries is the Web version of the internal programme for obtaining data, but with greater possibilities for making diagrams and very intuitive consultations aimed at the citizen. The level of consultation goes down to the town level and it is possible to carry out historical consultations with graphic information. The sections that can be publically consulted are very similar to the sections of the internal system of utilization of data and the parameters in open exceed 200. The Dynamic Map is also based on HDFI (Tool of Design of Forms in Internet) and it has a specific package of Java to generate graphics. The work of all the professionals interested in this subject -librarians, students, researchers, means of communication, etc.- is facilitated by this tool.

Practical applications of statistical management and approaches for the future

The investment in statistical management quickly brought good results regarding data supply. The whole process of improvement has permitted, in a relatively easy way, all provision of the data annually requested by the Spanish Ministry of Culture, the National Statistical Institute and the Valencian Statistical Institute. These statistical tools serve very often to answer certain specific reports requested by the Valencian Government or by its Department of Culture, as well as those requested by other departments. The data are analyzed by the Department of Books and Libraries for making reports on this subject and, occasionally, serving as a basis for the adoption of measures of improvement. Furthermore, some of these reports have been published⁷ in specialised magazines. In other instances, the annual overall statistical information has been provided to the media, so that citizens may appreciate the importance and the dynamism that public libraries have in present society. Working with the data has also allowed the drawing up of articles on certain aspects of the Valencian Library System⁸, and we expect that with the new Web application (Dynamic Map of Libraries), research in this field will increase.

On the other hand, since 2004, the Department of Books and Libraries, via its statistical programme, has also collaborated in the "Project Tibidabo" (<http://www.tibidabo-libraries.info/>), programme of the Diputació de Barcelona and the Consorci de Biblioteques de Barcelona carried out with the Foundation Germán Sánchez Ruipérez. This project concerns a comparative study between 2000 and 2003 of the situation and evolution of the public library service in cities and regions of Europe: Valencia, Barcelona, Madrid, Zaragoza, Oslo, Birmingham, Bremen, Helsinki, Stuttgart and Dublin.

The data are the principal part of statistical management, but these data only register facts without providing any value or interpretative judgment. The data must be analyzed, valued, and interpreted in order to generate information and, at the same time, knowledge. The information and the knowledge generated allow us to have a clear vision of the real situation of libraries and, at the same time, this knowledge allows for consistent policies and strategies to be adopted. The better the information; the greater the capacity to adopt adequate and appropriate decisions. In this context, the crossing of the library data strictly with demographic, economic and sociological variables produce indicators that allow a deeper knowledge of the situation and a greater capacity of comparison with the levels or ratios of other regions. The figures or absolute data must be analyzed and translated into ratios and indicators that allow a better understanding of the situation. The comparisons by chronological periods reflect on the degree of development of the different parameters and the dynamics, more or less positive, in each section (for example, sustainable and significant increase in number of visitors, stagnation in investments,

improvements in the computer equipment, etc.). Also, the preparation of graphics helps understanding and makes the reality of the situation or its development in a certain number of years more visible: graphics of loans per years, graphics of change in monthly visits, etc. It is very important to be able to study the data by geographic areas, so that one can delimit the indicators by districts, towns, etc. The library situation often changes radically in relation to the region. In short, once the right tools for statistical management exist, it is more and more necessary to further analyze the data and work with them for developing indicators and zonal studies. On the other hand, another essential aim in statistical management is to obtain each time a greater consistency level in the data.

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Abstract

In 2000, the coordinating institution of library policies in the Valencian Community (Spain) began a process of improvement in the statistical system of the Valencian Library System that has allowed a better knowledge of the current state of the regional library network and which acts as a tool for the decision-making process in connection with library policies. This paper analyzes the progress brought about in statistical management, the new computer programmes developed and its practical applications in library policies and in research on public libraries.

Key words: Statistical management/ Data processing/ Library policy/ Computer programmes/ Valencian Library System

Resumen: En el año 2000, el organismo coordinador de política bibliotecaria en la Comunidad Valenciana (España) inició un proceso de mejora de la gestión estadística del Sistema Bibliotecario Valenciano que ha permitido poseer un mejor conocimiento del estado actual de la red bibliotecaria regional y que actúa como herramienta para la toma de decisiones de política bibliotecaria. La comunicación analiza los progresos realizados en la gestión estadística, las nuevas aplicaciones informáticas desarrolladas y sus aplicaciones prácticas en política bibliotecaria y en investigación sobre bibliotecas públicas.

Palabras clave: Gestión Estadística / Procesamiento de datos / Política bibliotecaria / Aplicaciones informáticas / Sistema Bibliotecario Valenciano

Development of Estonian public libraries during the last decade. (1994-2004)

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Research and Development Centre
National Library of Estonia*

Estonia, one among the three Baltic states, regained its independence 13 years ago. The official language of the country is Estonian and the national currency unit, at the present moment, is still the Estonian kroon (EEK). Estonia acceded the European Union on 1 May 2004. Its population is 1 377 445 inhabitants and area of its territory - 45 227 km². Estonia is divided into 15 counties and governed by 241 local governments.

The major developments in Estonian libraries during the 1990s were the following:

- Legal basis was created for the functioning of the library system
- The library network was reorganised
- The information technology of libraries was modernised
- The educational level, professional knowledge and skills of library staff improved
- The co-operation between libraries broadened both on the national and international level

After Estonia regained its independence, the country carried out a library reform during 1992 to 1994. In 1992 the Riigikogu (Parliament) adopted the Public Libraries Act specifying the regulation of the work, collections, services, management and financing of public libraries. All public libraries were transferred to municipal ownership. In addition to that several sub-acts have been adopted, co-ordinating the basic operation and work processes of public libraries.

The Public Libraries Act notably supported the development of library services to the wide public in the new democratic state, also improving the economic con-

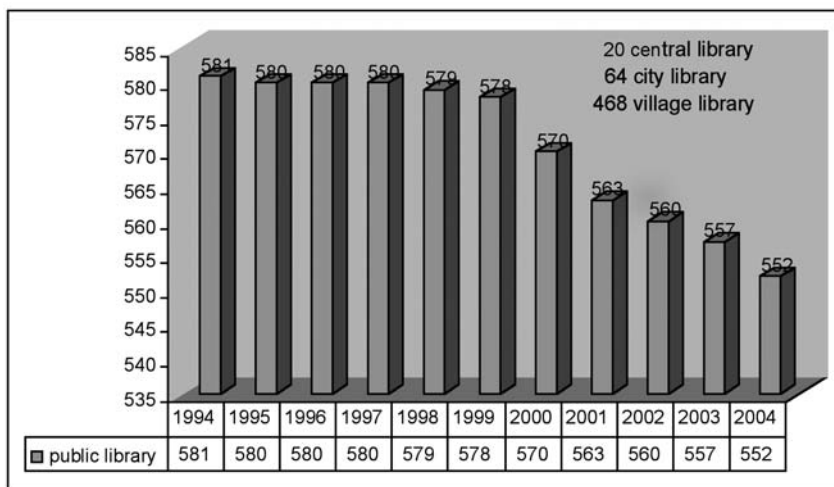
ditions of public libraries and creating prerequisites for the implementation of new information technology solutions.

All public libraries are supervised by the Ministry of Culture who is responsible for the statistics in the field of culture. The collection of statistics, and verification, processing and analysing of data has been assigned to the National Library of Estonia. The National Library's Research and Development Centre manages the statistical database and specifies the criteria for data collecting in accordance with all national legal acts and ISO standards. These unified principles and methodology have been applied to data collecting since 1992, all this statistical information is preserved in the electronic database of the National Library of Estonia.

Network of public libraries

The network of public libraries survived almost entirely thanks to the timely adoption of the Public Libraries Act and to the development of libraries into the local centres of culture and education.

Today there are 552 public libraries, among them 20 central libraries, 64 city libraries and 468 village libraries.



The last decade has witnessed a decrease in the total number of public libraries by 29. In most cases it has been the result of organisational changes, i.e. the joining of services for children and adults as well as public and school libraries. Only very few libraries have been closed down.

The total number of inhabitants in the country has decreased, causing the joining of libraries in very small villages and thus enabling to save resources.

Libraries according to the number of inhabitants:

Up to 500	inhabitants – 140 libraries
501 to 1 000	inhabitants – 206 libraries
1 000 to 3 000	inhabitants – 128 libraries
3 000 to 5 000	inhabitants – 22 libraries
over 5 000	inhabitants – 56 libraries

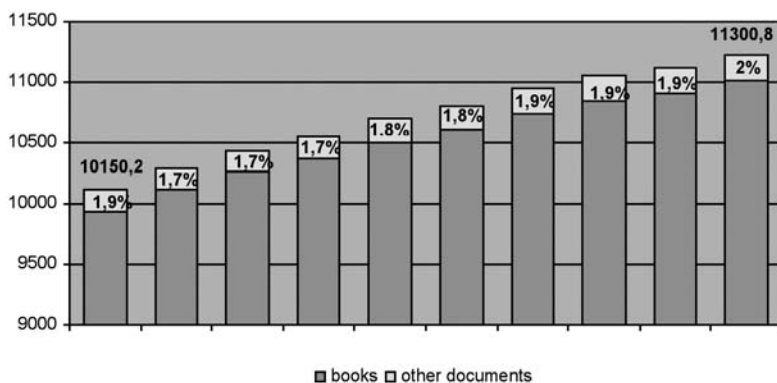
Collections

In 1995 the total collections of public libraries comprised over 10 million documents. During the last decade public libraries have acquired 5,3 million new documents and withdrawn 4 million documents, the total rise has thus been 1,3 million documents. The extensive movement of collections during the past 10 years has undoubtedly enriched library resources, considering the strict censorship of publication during the soviet occupation. Annual acquisitions per one reader have stayed on the same level during all the past years, being 1,2 documents per user.

The collections of public libraries today comprise 8,3 documents per one inhabitant and nearly 26 documents per one user.

In small rural municipalities libraries constantly exchange literature within the municipality in order to ensure optimum use of resources.

The majority of the collections in public libraries is made up of printed books which form 98% of the total.



The remaining 2% are other documents which in turn are divided as follows:

1,3% - printed magazines
0,1% - other printed documents
0,6% - audio-visual documents
0,02% - electronic documents

The coming years must certainly increase the proportion of electronic documents but the high price of technical equipment slows down this process in public libraries.

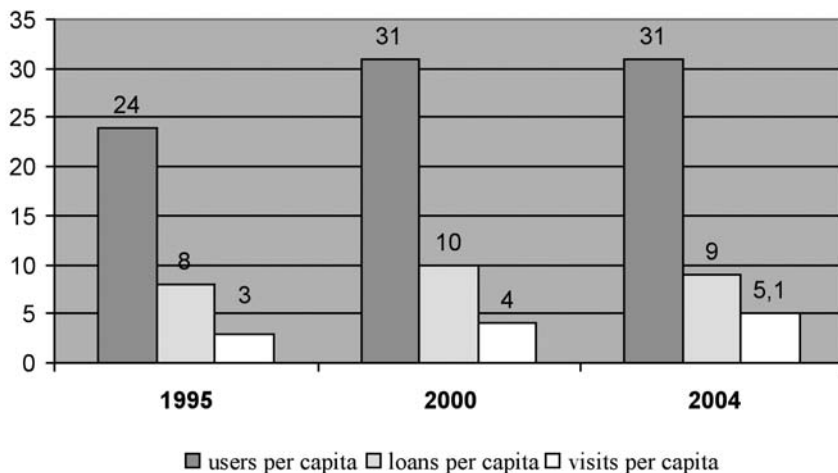
By languages the collections in Estonian public libraries can be divided as follows:

	1995	2004
Estonian	73%	79%
Russian	25%	19%
Other foreign languages	2%	2%

The role of other foreign languages has increased considerably in everyday life but public libraries cannot fully consider it in their acquisition policy. Books in foreign languages (except Russian) are considerably more expensive and acquisition resources are insufficient.

The percentage of fiction and children's literature has been the stable 63% of the entire collections.

Use of libraries



The following factors have had an impact on the use of libraries:

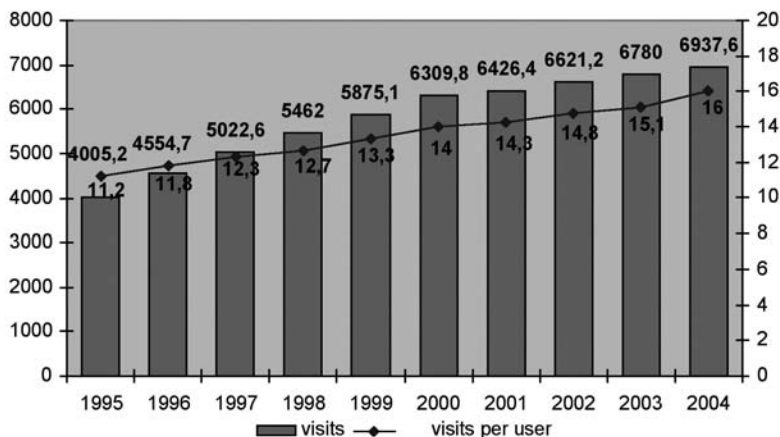
- New library buildings, modern working environment
- Internetisation of all public libraries
- Greater diversity of collections
- Availability of public electronic catalogue to all users

All the above developments have been the basis for constant increase in the number of readers and library visits during the past decade. In 1995 the percentage of library users among the entire population was 24% while in 2005 the corresponding percentage was already 31. (See fig. 3)

	1995	2004
Visits per capita	3	5
Visits per user	11	16

The Public Information Act, adopted in 2000, notably extended the functions of public libraries and changed the statistics of library use. The said Act specifies that the State and local governments must ensure access to public information via the Internet in public libraries. Within 3 years, all Estonian libraries were provided with Internet connection and at least one PC for users under a corresponding national programme. This has certainly been one reason for the increased number of library visits.

Another factor increasing the number of library visits is lifelong learning – a library has become an educational environment.

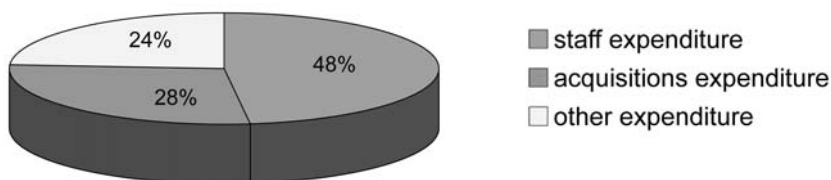


The change in the amount of readers in 2004 was -2,1. The number of loans is constantly decreasing. Why are all the positive changes not reflected in the statistics of readers service?

- The population of Estonia is relatively small and all minor changes have a notable impact on the statistics. As the increased quality in all areas of readers' services is usually preceded by the reorganisation of library services (closing down, shorter opening hours, denied access to certain part of the collections), all these changes are immediately reflected in statistics.
- Since 2000 public libraries are not calculating the on-site use of documents, this has been another factor influencing the amount of loans.
- Another reason for the smaller total of readers is the decreasing number of inhabitants and children as readers. After the re-gaining of independence, the birth rate went down in Estonia and libraries have less and less children among their readers.

Division of budget in Estonian public libraries

Running costs divide as follows:



Acquisition costs generally comprise 48% state allocations and 52% local government allocations, the contribution of local governments has been growing constantly. The proportion of acquisition costs in the budget has increased by an average of 2-3% annually which is certainly insufficient considering the growing prices of new documents.

To sum up

Estonian public libraries still have to undergo certain changes. The administrative-territorial reform has not been completed and the desired efficiency of regional development and administrative capacity has not yet been achieved. Larger local government units definitely have to consider the uniting of small and perhaps inefficient libraries in order to have one larger and more effective library.

The role of public libraries in the Estonian society is considerably wider than just that of providing library service. Public libraries often act as cultural and social institutions. For that reason the efficiency and performance measurement of public libraries in smaller regions may not always be justified as the library may well be the only local cultural institution.

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Abstract

This analysis is based on Estonian public libraries' statistical reports of 1994–2004. During the period, the forms of statistical reports have changed. The instructions how to present library statistics have been improved to meet the requirements of international and national standards and other guidelines.

In this report, I dwell upon public libraries' network and some basic indices (collections, users, loans and visits).

After the restoration of the Estonian state, library reform took place in 1992–1994. As a result of the ownership reform, public libraries were made a municipal property. The adoption of Public Libraries Act in 1992 contributed the preservation and development of public libraries' system. The Act facilitated the development of public library services in the new democratic state, by improving, inter alia, material situation of public libraries.

During ten last years, the number of public libraries has decreased. The provision of library services has been considerably reorganised (numerous children's libraries have been affiliated to municipal libraries that have got new premises, suitable also for the provision of children's services; several village libraries have been turned into service points of rural commune libraries).

The changes in the library network will continue in the future because of on-going economic changes and the need to improve library services.

The demand for library services has grown in recent years. Rapid social development, a constant need to learn, and the development of IT in libraries have all contributed to consistently increasing importance of public libraries.

The numbers of library users and visits have grown steadily during the past decade.

Every third resident of Estonian is a registered library user and 4.7 visits per year have been counted per capita.

The rapid growth of library visits has been largely influenced by the fact that libraries have been connected to the Internet.

Since 1994 the number of library users has increased. However, since 2000, the number of library users in rural areas has decreased, caused by the decrease in the size of rural population.

The public libraries' collections total about 11, 120,000 items, predominantly books and other documents on paper carriers. Documents of other format make up 1 percent of the collection.

The financial support is allocated from the state budget on the basis of money allocation per resident of a particular area served. The amount of money granted to libraries for book purchases by local governments has been very different, being especially low in bigger towns. The last decade saw the boom of publication. Compared with Soviet era, the annual production of book titles has redoubled. Libraries have preferred to acquire more titles in less number of copies. Only one copy of a reference publication is purchased for a rural library; the number of copies of fiction and children's literature is also low.

Audit for libraries... which one?

Marielle de Miribel,

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When a library manager wants to see how the library is managed, he or she has to operate an audit. But which one could he choose?

There are many possibilities of assessing the way the library is managed, and I shall propose here three methods of survey: Marketing audit, Culture audit, and Structure audit. Each of these has a special purpose, so as to get inside the library with different viewpoints.

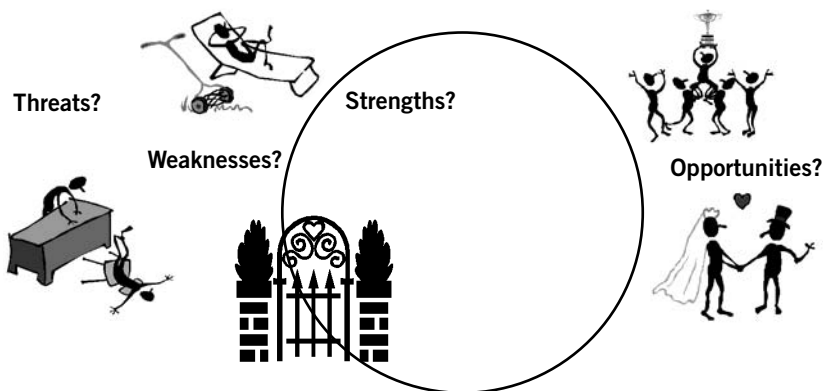
Marketing audit



What is the use of it? It is like leading an orchestra, keeping balance between internal and external pressures.

As it is the library manager's job, for who is in charge of reaching the aims and goals of the library.

Marketing audit is summarized in four letters: SWOT: S for Strength, W for Weaknesses, O for Opportunities and T for Threats.



For the study of the environment, there are threats or opportunities, and for the inside survey, we speak of weaknesses and strength.

With a marketing audit, the survey of the situation is a dynamic map for interpreting facts. By the way, the same fact can be seen for one library as a weakness and for another one, as a strength.

For example, if you have three young girls in the staff, would you consider that as a weakness or as an opportunity? And if there is a new Internet Club next to the library, could you consider that as a threat or as an opportunity?

Marketing audit is a very large way of keeping reality in mind; how to be sure that any very important item to consider is not forgotten?

In my opinion, pressures exerted by the environment are more important for the life or the survival of the library than those coming from within, as we could see in Structure audit. So I just suggest not to say SWOT any longer, but TOWS!

Culture audit



What is the use of it? The aim is the reduction of the gap between the external representation about the library and the way the staff wants to be considered. Very often, there is a very significant difference in viewpoints: librarians are supposed to read all day long.

Culture audit is the job of the communication officer of the library. He has to collect information about the history of the library and its activities, to be able to incline the perception and the image of the library in a way which is much closer to reality. He is working on values, perceptions, representations, and the world of the mind. Culture audit is the preliminary and necessary job for every work on pictures and signs for the library, to be able to give it a living and representative logo and graphic chart.

The library's communication officer has two important difficulties to cope with: most of the material he needs is oral as there is not much written material. When the librarian who is the memory of the library is retiring or leaving, all the precious and necessary information vanish.

The other difficulty is that the librarian's world is not very businesslike, and many librarians do things, realise many successful projects for users, but nobody knows... To realise a culture audit, there are five focus points to consider:

- Founders and foundation of the library
- History of the library
- Professional abilities
- Values
- Signs and symbols



Founders and foundation of the library are important to consider, as the person who made something emerge from nothing has a positive energy, which stays and influences all the foundation keys. His/Her personality, his/her challenges, the innovations s/he introduced, his/her principles and rules to cope with the environment, management, and research can influence

decision-makers during decades and centuries.

In the memory of the library and librarians, many facts can be relevant: we can find the year when all the librarians were pregnant, the one when there was a strike, the one when the shelves were inundated, the one when they changed the computer system, or methods of management, etc. Every fact concerning key figures, structure, great moments, and important changes in the environment is relevant.

In professional abilities, the following ones are to consider :

- profession as received (the way the other see us),
- profession as obvious (quality labels, training sessions...)
- link between profession and activities (successful products and services)
- link between profession and abilities (rules and principles)
- link between profession and ways to do it (front / back office, research / production, structure / environment, new technologies...)

The best way to have a real survey of what life is in a library is the study of signs and symbols:

- Every element of external communication is to consider: B to B communication, phone calls, access, etc.
- the way of running relations inside the library: ways of talking, dressing, lunching, etc. For example, is coffe time a ritual for discussing work or chatting, are there commemoration cakes ...?
- space and time management : how are circulations, schedules, links between office and working hours ?
- and about symbols, which are specific and relevant rituals, rumours, and external communication tools ?

The last but not least item to consider is the values of the library:

- there are values as declared : conventions, manager statements
- values as obvious : strategic choices, characters
- operating values : quality control, policies and procedures
- behaviours with administration, competition, environment

With that more complete survey, the communication manager can work on focusing on the more relevant items to market and lobby the library in its environment. He can do it himself as nearly 80% of the informations are in the hands of the staff, or ask a consultant for inquiries and evaluation.

Structure audit

What is the use of it? The aim of this audit is to cure ailing structures as libraries could be. If marketing and culture audit were able to be held in inside business, structure audit has to be conducted by an external consultant who would not be involved in structure games.

There are four focus points which are :

- Environment
- Working group
- Membership
- and Group authority, with Canon and Leadership.

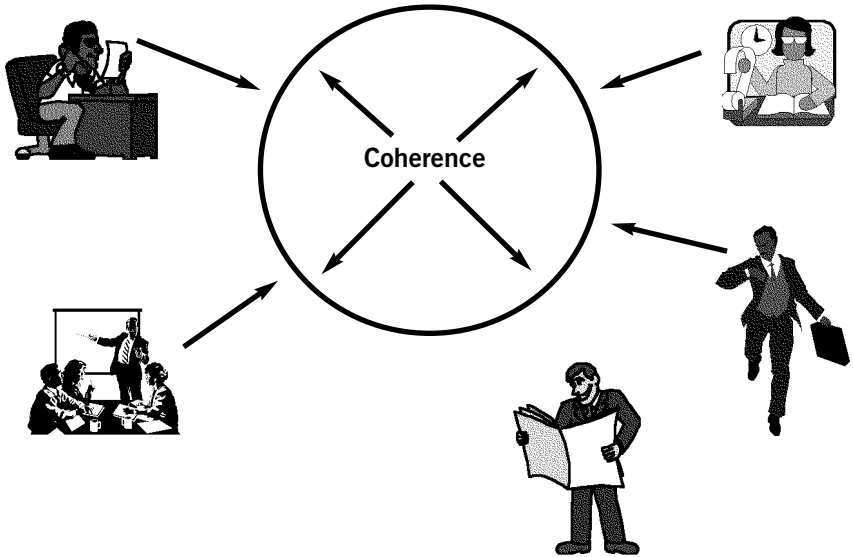
Environment

The most important key is the Environment, as the world is changing. And the job of the environment is to push, exerting pressures on the boundary of the library. For example, users ordinarily want larger library hours, and more services, and facilities, and free of charge. Partners in common projects want jobs for the library and notoriety for themselves. And institutions want good and free services from the library.

As a library exists because it meets a need in the environment, it is a necessity for the manager to sniff at what is changing in the environment, to be able to adapt the library to the new strategic focus points: What is the added value of this library faced with competition ? What is now the strategic goal? If the library were to close down just now, who would be the most handicapped by the lack of answer for its needs?

The manager has to face many different and contradictory pressures from the environment and has to choose between them and main priorities. In that external group process, he has the task to balance pressures from the environment with coherence.

He has to give the environment a coherent face in his talks and facts. And that is a great difficulty for a librarian as he has to encounter complexity and antagonism in the priorities. For example, if I am a small public library manager, how can I focus on elderly peoples' services for example, which is the Mayor's priority, and continue to track illiteracy, which is a long term project, with the same funds and staff?



Working group

«Working» means two things: activity and process. If it is easy to qualify activity as work, it is less obvious with process. It includes training time, communication, rituals, games and fights inside the library and outside, and so on. The sole difficulty to consider is that when people are focused on activity, they are not on process, and vice versa.

Membership

In membership, there are two points: public structure and private structure. In public structure, open to public observation, there is to consider organisational structure (organisation chart) and Individual structure (who is in this position?). Very often, librarians deal with difficulties in mixing organisational and individual structure, putting together people who like one another but don't have the best abilities for the job they have to do.

The Private structure is the way each person feels his own place in the group. And that feeling is mostly private and secret. By the way people behave according to that private structure, some consultants can tell where there are problems inside the structure of the library.

Group authority: Canon

The canon of the library is a sort of foundation of the structure. There we find:

- Constitution and Rules, with name, goals and aims, rules and amendment procedures. There we find the legitimacy of the library and its inner strength (or weakness).
- And in Culture, we find most of the items we found in Culture audit: as technical culture (the way people do it), group etiquette (values and statements) and group character (the way staff can have the freedom of dressing and behaving, without being rejected cast out).

Group authority: leadership

That is, with the Environment survey, the most important point for the welfare of the library.

There are three functions for the leader, which can be focused on the same person or not : Responsible, Effective, and Psychological leadership.



- **Responsible leader** is nominated and legitimated by institution. He is the one who can tell the staff and environment where to go and why.



- **Effective leader** is the one staff is hearing when there are doubts about activity. He is coopted by the staff and may or may not be the responsible leader. He is the one who knows about changes in the environment, because he is an expert in his field. He knows about strategic goals and is the real leader of the structure. He is influent on action fields. Curing consultants have to make responsible leaders become effective leaders.



- **Psychological leader:** he is the person that a member of a staff would consult about private career and doubts concerning job opportunities. He is influent in talking and words area. If he is against any change, for example, change will not occur. This leader too is coopted by staff, and may or may not be the responsible leader.

Big problems in libraries, as in any other organisations, lay in misunderstanding and not acknowledging this three leaderships.

- **Apparatus** is the means that the leader can lay on, in order to know about reality and problems. Secretary and very often library are parts of an apparatus.

To conclude with that presentation of three sorts of audits, I shall just point out that Structure audit is the most complete investigation, which includes Marketing and Culture audit. With this one, the library management is scanned and criteria for cure are current.

Thank you very much.

Bibliography:

The Structure and Dynamics of Organizations and Groups, by Eric Berne.

Abstract:

Comparaison entre un audit de culture, un audit marketing et un audit de structure, dans le cadre d'une médiathèque Différents outils d'analyse, empruntés au monde privé, permettent d'appréhender la complexité des bibliothèques et de comprendre quels en sont les enjeux stratégiques. Je me propose de présenter brièvement ces trois outils de diagnostic, de montrer quel en est leur intérêt et en quoi ils se complètent mutuellement.

1. L'audit marketing (SWOT)

C'est un état des lieux subjectif, à l'instant T. Il étudie de façon dynamique :

D'une part les enjeux externes à la structure (opportunités/ menaces) : c'est une carte de l'environnement, observé du point de vue de la structure considérée.

Et d'autre part, les ressources internes (forces / faiblesses) également du point de vue de la structure considérée, à l'instant T.

Ces deux constats permettent de dresser les écarts éventuels entre les objectifs espérés et réalistes.

2. L'audit de culture

Dans un autre registre, celui du patrimoine, l'audit de culture est un inventaire des 5 points clé qui permettent à une structure de définir les bases de son capital d'image. (les fondateurs, l'histoire, le métier, les valeurs et les signes et symboles). Il permet de nommer, faire exister, consolider et fructifier le capital d'image qui sous-tend toutes les actions de communication externe et interne à la structure.

3. L'audit de structure

Il étudie la complexité de l'organisation considérée, à partir de l'environnement, pour en déterminer les objectifs stratégiques, condition de survie de la structure. De là, tel un fil rouge, il balaie les différentes zones d'exploration (autorité du groupe avec leadership et canon, membres du groupe et activité du groupe) pour permettre de se poser 12 questions concernant les points clés déterminant la bonne santé générale de la structure.

Conclusion

Après cette présentation théorique, on pourrait prévoir un atelier en 3 groupes, où les participants dresseraient le profil d'une bibliothèque témoin, état des lieux suivi d'une mise en commun et de commentaires en terme d'enjeux stratégiques.

Coordination of higher educational institutions and professional library associations – the key to training quality rise of librarians of XXI century

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Introduced by IFLA the slogan: “Libraries are the heart of information society” essentially changes the approach to the librarians training. The transition from information society to knowledge society, transformation to modern education paradigm made necessary cooperation of higher educational institutions and professional library associations. The main forms of this cooperation are discussed.

“Libraries are the heart of information society”. Presented by IFLA, the slogan “Libraries are the heart of information society” exactly reflects the key role that libraries have to play in solution of one of strategic tasks of modern society: in providing access to information and knowledge for all. The 69th IFLA Council meeting (Berlin, 2003) passed the following resolution on the World Summit on the Information Society: “Whereas the world Summit for the Information Society offers a unique opportunity to be recognized as the heart of the information society... it is resolved that IFLA calls upon all governments to address the growing gap between the information rich and the information poor, and promote library development programs for poor rural and urban populations, library instruction through libraries, and the strengthening of library educational programs”.

According to this resolution Russian Library Association (RLA) held in 2004 the 9th Annual Session and Conference under the slogan: “Libraries are the heart of information society”. At this largest forum of Russian library professionals among the most important ones the problem of library staff training called to provide Russia’s entering into information society was discussed. At that practicing librarians and higher educational institutions’ teachers were united in admission that it is necessary to change essentially the organization of library-information

specialists' training. So, if we really believe that "Libraries are the heart of information society", then the problem of quality of librarians' training gains a special meaning. However, it is impossible to answer the question of what exact changes must be done in this training without taking into consideration the context of these changes which, firstly, are connected with information society development, and, secondly, with the transformation of modern education paradigm.

From information society to knowledge societies

It is known that one of the main theses of UNESCO to World Summit for the Information Society is in that for overcoming the digital inequality it is needed to move along the way of knowledge societies' building. In his interview UNESCO's Assistant Director-General for Communication and Information Abdul Waheed Khan explained how the concept of "knowledge societies" differs from that of the "information society" and why, in a world where 80% people still lack access to basic telecommunications, knowledge societies are the key to a better tomorrow. He said: "Actually, the two concepts are complementary. Information society is the building block for knowledge societies. Whereas I see the concept of "information society" as linked to the idea of "technological innovation", the concept of "knowledge societies" includes a dimension of social, cultural, economical, political and institutional transformation, and a more pluralistic and developmental perspective. In my view, the concept of "knowledge societies is preferable to that of the "information society" because it better captures the complexity and dynamism of the changes taking place"[1]. Answering the question: "what is the role of education in this process?" he underlined that "education – both in traditional and in new settings – is the key to creating equitable knowledge societies".

Having based on the analysis of special publications, it is possible to state the main factors characterizing information society and knowledge societies:

- information and knowledge is the main transforming force of the society, and information resources are the strategic resources of society;
- global informatization, rapid development of information – communication technologies are the base of a new economics, economics of knowledge;
- novelty, fleetingness, acceleration are the most characteristic features of life;
- innovation cycle of both industrial and social technologies amounts to 6-8 years, outstripping generations' changing;
- life-long education and ability to re-qualify are part and parcel of preservation of a person's social status;
- every person's destiny depends on the ability to find timely, obtain, apprehend adequately and use productively new information.

These factors, on my deep conviction, must be taken into consideration at any

specialists' training, but they have special meaning in perfection of library-information staff training.

Transformation of modern education paradigm

It should be underlined that library education development cannot be done without taking into consideration the situation existing in the world system of education. Universally recognized that it overcomes the crisis. This crisis of the education system is alongside with such global crises as ecological, raw-material, energetical ones etc. Here are the most important contradictions specific for the crisis of education system:

- between education's orientation to the transfer as more as possible produced knowledge to learners and their physical inability to acquire the "avalanche" of knowledge;
- between traditional "supporting" education accounted to relative stability of society and gradual development of social processes and more dynamic and complex developing society;
- between swift development of information-communication technologies and the inertness of instructional technologies;
- between cultural-national specific character of education systems and the need of modern society in unified standards and criteria of education quality.

The reaction to these contradictions became the appearance of a new education paradigm – education paradigm for tomorrow. Its specific features are:

- mastery of work skills with any information, with heterogeneous, contradicting data, skills' formation of independent (critical) and not reproductive thinking;
- shift of the main accent from assimilation of large amounts of information accumulated for future use into assimilation of ways of long-life acquiring new knowledge and ability to learn independently.

Key competencies

The new education paradigm presupposes the transition from the traditional principle "to form professional knowledge, abilities and skills" to the principle "to form professional competence".

Competence is a sphere of relations existing among knowledge, abilities and actions in human practice. The connection is evident: without knowledge, abilities and skills there is no competence, but not all knowledge, abilities and skills and not every situation can be considered to be competences. I should remind that

the idea of key competences was introduced by experts of European Council in education. They identified five groups of key competences which have a special meaning and which must be acquired by citizens of information society:

1. Political and social competences, such as an ability to take responsibility, participate in mutual take decisions, regulate conflicts by an unviolent way, participate in functioning and improving of democratic institutions.
2. Competences concerning life in multicultural society. In order to prevent racialism or xenophobia, spreading the climate of intolerance education must “equip” the youth with cross-cultural communications, such as recognition the differences, mutual respect to each other, ability to live in peace with people of other cultures, languages, and religions.
3. Competences connected with abilities of oral and written communication, which are so important in work and social life that persons who do not have such competences can be excluded from the society. To have a good command of foreign languages taking ever-growing importance belongs to this group of communication.
4. Competences connected with the rise of information society. A good command of new technologies, understanding of their use, advantages and disadvantages, ability of criticism to information spreading by mass media and advertisement.
5. Ability to long-life study as the base of continuing training in professional, private and social life.

Thus, the solution of the problem of training quality rise of librarians must be fulfilled with taking into account the three factors characterizing modern education system in general:

- information society development and its transformation into knowledge society;
- change of “education for the rest of life” paradigm into “education for long-life” paradigm;
- transition from the traditional principle “to form professional knowledge, abilities and skills” into the principle “to form professional competence”.

Cooperation of higher educational institutions and professional library associations

Alongside with general systematical factors and demand claimed to modern education the important factor of optimization of modern library-information education is the cooperation of educational institutions and professional library associations. It is the professional library community that can and must formulate the require-

ments both to the contents of professional education and to the quality of library-information specialists' training.

For many countries having long traditions of professional library associations which fulfill the functions of results' evaluation of educational institutions' activity in librarians' training this problem may have been solved. However, for modern Russia this problem is rather actual. Its actuality is conditioned by the fact that even in the recent period, the period of the USSR, under conditions of totalitarianism, the activity of educational institutions was extremely ideological, strictly controlled on the part of the state, and professional library association didn't exist at all.

Russian Library Association (RLA) as a public professional organization was established only in 1994. RLA's establishing was called up by the necessity to activate public library movement, to unite forces and coordinate the actions not only communities and organizations, but working staff of libraries of all levels, types and specializations, education and other institutions in order to preserve and develop librarianship in Russia. Nowadays, RLA is an important corporate professional organ within the structure of which there are 31 sections and 3 round table conferences. Among all the sections I'd like to mark up the section of library profession, librarians and long-life education and the section of R&D in library-information activities which are closely connected with the tasks' salvation of quality perfection in library specialists' training.

I'm a member of both sections and the head of the R&D section. At the same time, first of all, I'm a teacher, professor of the University which trains library-information specialists. So, my most important task is to provide a productive dialogue between educational institutions and RLA which reflects demands of professional community to the level of undergraduates' training.

The problem of elaborating the mechanism of cooperation of higher educational institutions and library associations

The main problem is to elaborate an effective mechanism of cooperation of higher educational institutions and library associations. It gets a special actuality under conditions of development and introduction of state educational standards. The standards are considered to be the most important tools of quality evaluation of library education and staff training.

The activity in education standardization in general and library education as a part got development in Russia not long ago, namely from the middle of the 90s. Standardization development is mainly connected with the education contents' renovation. The main pre-conditions for its renovation are: principal changes of Russian social-economical fundamentals: fleeting development of new information

technologies, global informatization and information society establishing; the change of factors influencing the education system.

The system of state standards of higher library education of Russia

Since 2003 a new system of state standards of higher library education in Russia presented in the following table has come into action:

Name and code of speciality or direction	Name of received qualification	Period of study
Direction 531000 "Library-information resources"	"Bachelor of library information resources"	4 years
Speciality 052700 "Library-information activity"	"Librarian-bibliographer, teacher"; "Manager of information resources"; "Technologist of automated information resources"; "Referent-analyst of information resources"	5 years
Direction 531000 "Library-information resources"	Master of library-years information resources"	6 years

What was the new in this system? Distinctive features of a new system of library education standards are the following:

- according to Bologna process in Russia there has been done a transition to multistage library education on the base of introduction of bachelorship and mastership;
- all the universities of culture and arts which have been training librarians – bibliographers of higher qualification in speciality "Librarianship and bibliography" turned to a new speciality "Library and information activity";
- introduction of standards' system reflects radical changes connected with social-economical changes in Russia: development of marketing relations, democratizing freedom and privacy in a choice of education, setting free of educational institution from ideological dogmas, administrative guardianship and over-reglamentation. The advantage of actual education standards is the possibility to regulate the quality of education, to provide a unified educational space in Russia, to develop multy-level library education;

- while developing the standards there was used a new strategy – the strategy of collective work. It embodied a temporary creative group consisting of experienced teachers of Moscow, Saint-Petersburg and Kemerovo State Universities of Culture and Arts who were the developers of education standards;
- for the first time there was a close interaction of developers of the education standards with professional library community – Russian Library Association.

In what way there was an interaction among the Universities – developers of standards of higher library education with RLA

It included the work in the following direction:

- publication the project of a new standard in the newsletter of RLA and on Web-site of RLA, publication of articles devoted to the problems of standardization of library education in professional editions for wide information of library community about new developing standards;
- holding scientific – practical seminars, conferences, round-tables together with RLA that provided a dialogue of teachers and librarians on different levels: regional, Russian and international;
- discussion the standards’ project at the section of library profession, staff and long-life education at the annual conferences of RLA (Tver, 2000, Saratov, 2001, Yaroslavl, 2002, Pskov, 2003).

To the analysis and evaluation of this work members of RLA, practical-librarians including the heads of libraries were invited. Everything was done to put away the negative situation which took place before when the standards regulated training the library staff developed without clearly expressed orientation to the needs of library experience and demands of employers and without any attention to the position of national professional association. As the result there was a large scale professional discussion of standards. The leading library-information specialists were invited as the experts that led to the quality rise of developed standards. In the course of mutual work it was admitted that creation of national education library standards’ system would serve the base for their integration with analogical education systems of the developed overseas countries. Besides, development of education standards allows creating the national system of evaluation on the professional education quality on the principles of succession and integrity of library education which serves the foundation in developing principles and methods of educational testing, formation of demands’ system to the level of librarians’ training at every step of education.

The problems which must be solved at the national level

Mutual work cleared up the demand in perfection of the interaction's mechanism of higher educational institutions, libraries and Russian Library Association. The solution of this problem supposes its stratification:

- the level of higher educational institution. At this level there is a need of development scientifically based demands of the society in information-library specialists; development of scientific foundation of education programs' contents; development of educational-instructional materials for library-information staff;
- the level of Russian Library Association. On the part of RLA there is a need to make up the consolidated opinion, generalization and expression requirements of libraries to the qualification and quality of library-information specialists of different steps of professional education; discussion and control of standards, evaluation of text-books created in the Universities at the sessions of RLA and in "Proceedings of RLA";
- the level of libraries. The leading specialists of libraries should elaborate and formulate the requirements to qualification and quality of library-information specialists; they also should be the experts in evaluation of education standards and textbooks written in higher educational institutions.

The problems that should be discussed at the international level

To conclude with it should be stated that standardization of a modern system of education is the all over the world tendency and education standards are the most important tool of evaluation library specialists' training called to pay deep influence for people readiness to live in information society and knowledge society. According to this point of view generalization of Russian experience of interaction of higher educational institutions and professional Library Association allows to come to some conclusions which, to my mind, not only reflect national specification but may be the object of international library community. They are the following:

1. Development and perfection of education standards in library education must be based on the principles of a system approach and integrity. Optimization of existing library education standards must be built on realization of long life education "education during the whole life".
2. Correction of existing ones and development of a new version of education standards requires carrying out complex scientific research work which foresees the mutual forces both higher educational institutions and members of professional associations. Development of library education standards is a specific task of library science within the frame of which there is its self-reflection. So to solve this serious problem it should be done:

- to identify the goal of library education under conditions of information society and knowledge society;
- to define the criteria of contents of professional library education;
- to define more exactly the criteria of a graduate readiness to professional activity.

This research should provide scientifically based decisions about criteria of differentiation of education contents at various steps of education system (bachelor-specialist-master); to formulate more exactly the requirements to professional competency of graduates who got professional training of different levels, to provide integrity and unity of standards' system for library education.

3. Optimization of standards' system which allows controlling library education's quality should be done under conditions of wide participation of library professional associations in discussion of the quality of education standards in professional papers.
4. The formation of library education standards' system presupposes collegiality, united forces of scientists, university teachers and members of library community, because the standard is based on the agreement of sides as it states a single and optimal norm for majority. The standard is good only when it is well based. The work of education standards' development should be done on the long-term base with compulsory expertise and standards' evaluation for their perfection.

And at last it should be noted that if we take the metaphor offered by IFLA and believe that "Libraries are the heart of information society" then interaction of higher educational institutions and professional library association looks like communication vessels which are the sources of quality rise in training of librarians of XXI century, the century of information and knowledge.

References:

1. Abdul Waheed Khan. Towards knowledge societies //A World of SCIENCE, Vol. 1, No. 4, July–September 2003

Abstract:

The main preconditions of library education's renovation are information society establishing, global informatization, rapid development of ICT, realization of information resources as strategical resource of the society, the change of educational paradigm from "education to the rest of life" to "education during the rest of life", strengthening of library role as the most important social institution providing access to knowledge and information.

The content renovation of library education, training quality rise of library staff is the subject of interest for both higher educational institutions providing highly qualified library specialists' training and professional library community. The result of this work depends on a productive dialogue between the educational institutions and organizations expressing the requirements of professional community to the level of graduates' training. The most important corporate organization of professional community of librarians is library association. The main problem lies in the development of working mechanism of coordination of educational institutions and library associations. It gets a special acuteness under conditions of development and introduction of state educational standards.

During the last decade in Russia the activity of standardization of education including a library one got development. Standardization is deeply connected with renovation of the content of education. Thus, instead of the speciality "Librarianship and bibliography" traditionally taught by the Institutes of Culture and Arts in Russia since 2003 they started training staff in a new speciality "Library-information activity". The standard provides training graduates in such qualifications as "Librarian-bibliographer, teacher", "Manager of information resources", "Technologist of automated information resources" within above-mentioned speciality.

For the first time there was close coordination between developers of educational standards and professional library community – Russian Library Association (RLA) which provided a possibility of a large-scale professional discussion of standards and attraction leading specialists of library-information activity as experts.

However mutual activity demanded the perfection of coordination mechanism of educational institutions, libraries and RLA. The solution of the problem of advanced quality of library staff training requires its stratification:

- Level of educational institutions: development of scientific base of the content of curricula; creation of text-books and educational instruction materials for library-information staff's training;
- Level of RLA: generalization and expressing libraries' requirements to qualification level and quality of library-information staff's training; organization of discussion and examination of standards, instruction books and text-books in the sphere of library education at the RLA sessions and in RLA Newsletter;
- Level of libraries: development and introduction requirements to qualification and quality of information-library specialists' training; participation in examination of educational standards, text and instructional books.

In my opinion, the problem of coordination of educational institutions and professional library associations are not of national but of international character.

La bibliothèque municipale face aux fluctuations financières : l'impensé managérial dans les bibliothèques municipales des villes moyennes

Limam Latifa, France

La bibliothèque municipale fait partie d'un secteur dont de nombreux auteurs ont confirmé qu'il est souvent le premier à être sacrifié au nom de la contrainte budgétaire¹. De plus, elle existe dans un environnement qui se révèle de plus en plus changeant et incertain. L'évolution permanente de la technologie de l'information et la diversité de l'offre documentaire ont engendré de nouvelles attentes, de nouvelles pratiques de lecture et des exigences accrues qui s'avèrent difficiles à satisfaire, notamment par les dépenses qu'elles entraînent. Les bibliothèques se trouvent ainsi dans des situations d'instabilité financière avec lesquelles elles doivent composer afin de perdurer dans l'environnement informationnel actuel.

La bibliothèque municipale est un service d'intérêt général dont la création, l'existence et la gestion dépendent de la municipalité et «aucune loi n'en exige la création ni n'en fixe des moyens minimaux.»² A partir de cette réalité, il est ainsi intéressant d'une part d'étudier les réalités budgétaires des BM et d'évaluer la place qu'elles occupent dans la politique municipale, notamment en termes de moyens engagés et de déterminer d'autre part les choix et les modalités de gestion qu'elles ont adopté afin de faire face à des situations financières fluctuantes.

Le terrain et la littérature représentent nos sources d'informations. Les bibliothèques municipales des villes moyennes (BMVM)³ constituent un champ intéressant car bien que représentatives de l'ensemble des bibliothèques municipales françaises, cette catégorie de bibliothèques n'a été l'objet que de rares travaux scientifiques qui s'intéressent à cette catégorie de bibliothèques. Une première enquête basée sur questionnaire a permis la collecte de données pour l'ensemble des BMVM, elle a été suivie par une seconde enquête qualitative (entretiens semi directifs) auprès des élus, des directeurs des affaires culturelles et des directeurs de bibliothèques (30 entretiens)⁴.

L'analyse de la littérature concernant les bibliothèques et les organisations dont le fonctionnement leur ressemble a permis de dégager de nombreux choix et moda-

lités de gestion qui se présentent aux décideurs. Ces choix sont différents et complémentaires. Il s'agit de :

- Se replier sur soi-même et donc d'agir seul en adoptant des solutions de remaniement interne ;
- Tarifier les services afin d'assurer des rentrées financières ;
- Avoir recours à l'extérieur pour :
 - chercher des aides, de nature financière ou autre,
 - mettre en commun certains services et ressources avec d'autres organisations et donc pour coopérer,
 - confier, en sous-traitance, certaines tâches à des entités indépendantes publiques ou privées.

Dès lors, chaque choix appelle de nombreuses questions : Quels sont les raisons qui ont incité ou empêché les responsables des bibliothèques d'opter pour un choix ou un autre ? Comment ces choix sont-ils appliqués ? Que génère leur application et comment pouvons-nous décider de la pertinence et de l'adéquation de chaque choix ?

L'analyse des résultats faisant l'objet de cet article sont exposés comme suit : d'abord nous présenterons les ressources financières accordées aux bibliothèques et leurs justifications ; ensuite, nous arborerons les solutions internes engendrées par une augmentation ou une diminution budgétaire, aussi bien que la tarification des services. Enfin, nous traiterons des différentes pratiques « externes » (le recours aux aides et aux subventions, l'élaboration de partenariats, la sous-traitance de certaines tâches).

I- Les BM : réalités budgétaires : bilan et constatations

La littérature concernant les bibliothèques nous apprend que les BM ont connu un progrès considérable aussi bien au niveau des locaux qu'au niveau de l'offre. Cependant, d'importantes carences subsistent et il semble que leur évolution demeure déséquilibrée. Afin d'expliquer ce constat, nous nous sommes intéressées d'une part au positionnement des BM dans les politiques municipales et d'autre part à leurs réalités budgétaires.

La place qu'occupe une bibliothèque dans la politique municipale est instable. Les raisons à cela sont multiples. En effet, la place accordée à la bibliothèque dépend de l'intérêt personnel de l'élu à un tel établissement, de la demande des citoyens électeurs et usagers, de la réalité socio-économique de la ville (« *nous sommes une ville universitaire, pas loin de 12 mille étudiants, une bibliothèque est donc incontournable.* »), de la comparaison et de la concurrence avec les villes avoisinantes et aussi de la présence d'un personnel compétent et assez convaincant pour être en mesure d'informer et d'orienter les choix des responsables politiques.

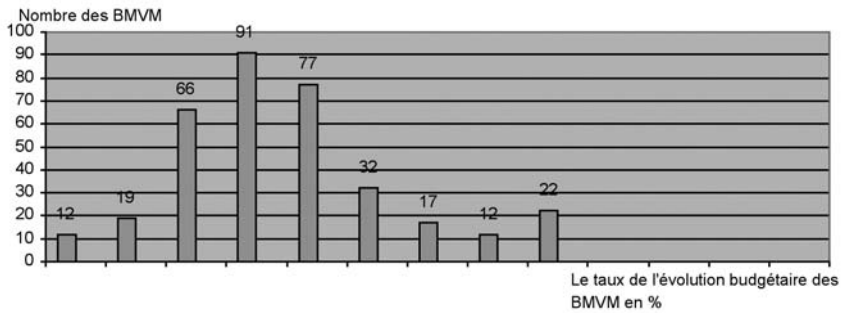
« *Le responsable de la bibliothèque, une fois qu'il possède une formation spécialisée, une personnalité convaincante... C'est assez pour négocier et obtenir ses demandes.* »

Aussi, il semble que le facteur économique intervient pleinement dans l'orientation des choix politiques concernant les bibliothèques. Les difficultés économiques dans lesquelles se trouve la ville (l'endettement, la dégradation des recettes liées à un manque, à l'inexistence ou à la disparition brutale de sources de financement : entreprises, etc.) pourraient orienter les choix politiques, soit vers d'autres priorités que la lecture publique, soit vers le développement culturel, considéré comme un véritable pôle de reconversion, créateur d'emploi et de richesse. « *La préoccupation culturelle est essentielle à l'Homme et un arrondissement sinistré a plus que les autres besoin de projets culturels structurants et mobilisateurs.* »

Par ailleurs, des changements de l'équipe municipale n'ont pas d'effets importants sur le positionnement de la bibliothèque dans la politique municipale. Nous avons constaté une continuité des choix et des décisions politiques concernant les bibliothèques malgré les changements politiques, et *a contrario* une continuité de couleur politique mais un changement de décisions et de choix en matière de culture et en particulier pour ce qui touche à la bibliothèque. De ce fait, la même couleur politique peut influencer d'une manière positive ou négative sur le financement des bibliothèques. Par ailleurs, il est impossible d'avancer que les bibliothèques municipales sont plus développées dans les villes de gauche que dans celles de droite ou l'inverse. Bien des élus ont compris l'importance de la lecture publique dans le développement social et économique, mais plus encore n'en sont pas convaincus.

En outre, pour nous rendre compte de la réalité budgétaire des BMVM, nous avons consulté, auprès de la Direction du Livre et de la Lecture (DLL), les budgets de toutes les BMVM pour la période 1990-2000. Nous avons choisi cette période pour deux raisons. La première étant les élections municipales, qui ont eu lieu en 1995. Certaines villes ont vécu un changement politique de nature à nous informer sur l'influence de la couleur politique sur le financement des bibliothèques. La deuxième, parce que cette période est suffisamment longue pour nous de constater une évolution des budgets dans le temps. Nous avons observé que parmi 348 bibliothèques, une majorité de 336 ont connu une augmentation de 2 à 8% durant cette décennie.

Nous ne pouvons pas conclure que les bibliothèques connaissent une situation florissante. Pour pouvoir interpréter ces chiffres, il faut aussi prendre en considération l'évolution du marché de l'information, à savoir l'évolution de l'offre et des prix. De plus, l'étude du budget de chaque bibliothèque nous permet de constater



que de nombreuses bibliothèques n'ont pas connu de stabilité budgétaire. Elles ont pu connaître, aussi bien une augmentation qu'une stagnation ou une diminution au cours de cette décennie. Cela explique le sentiment de mécontentement qui a surgi dans de nombreux cas malgré le fait que la bibliothèque représente souvent le premier budget culturel de la ville et que l'effort financier concédé par la municipalité à cette dernière est important. En effet, la fluctuation budgétaire continue et par conséquent, l'incertitude des moyens accable toute initiative réelle de développement. Ajoutons à cela l'inadéquation entre les budgets d'investissement et de fonctionnement. Les tutelles engagent des moyens importants pour la construction de médiathèques sans, une fois encore, en prévoir les budgets de fonctionnement adéquats.

Ainsi se présente la réalité des BMVM : un positionnement incertain par rapport aux tutelles et des fluctuations budgétaires permanentes qu'il faut gérer. Les BM sont donc appelées à effectuer des choix, à organiser leurs activités et à planifier leur actions dans la perspective d'une réalisation progressive de l'ensemble de leurs objectifs. Cependant, il nous reste à savoir si les BM constituent un champ favorable au management et à analyser la mise en oeuvre de l'ensemble des solutions dégagées par la littérature, à savoir les solutions de remaniement interne, de tarification et de recours à l'extérieur (pour la recherche d'aides financières ou d'autres nature, pour coopérer avec autrui ou, encore, pour sous-traiter).

II- Les solutions de remaniement interne

Un espace de liberté et une marge de manœuvre par rapport à la tutelle est indispensable pour la réussite de toute démarche managériale. De plus, un climat interne favorable et l'application des outils et des démarches managériales sont fondamentales. Pour le premier point, les bibliothécaires semblent bénéficier d'une marge de manœuvre assez importante. L'intervention de leur tutelle se résume souvent à la définition du budget. Cependant, pour les deux derniers points, la

décision reste du domaine de la compétence des directeurs. L'implication de l'ensemble du personnel semble limitée. De plus, les outils et les démarches managériales restent méconnus ou rejetés. Les démarches managériales se limitent souvent à l'évaluation qui se réduit elle-même à son aspect quantitatif et qui n'a souvent qu'un objectif de légitimation. Les bibliothécaires ont tendance à laisser parler les chiffres et à comparer le niveau de leurs activités avec le niveau national, étant donné la sensibilité de la tutelle à cette comparaison.

Face aux fluctuations budgétaires, il apparaît que les solutions adoptées le sont souvent d'une manière intuitive et subjective. Rares sont les cas où une étude des besoins a précédé cette adoption et tout aussi rares sont ceux où une évaluation a été prévue.

Dans le cas d'une diminution budgétaire, les solutions retenues consistent principalement, du côté des élus, à diminuer les budgets des acquisitions ainsi que les dépenses liées aux ressources humaines (le blocage de la création de postes, le non-remplacement de ceux qui partent à la retraite, le recours aux emplois jeunes ou à des vacataires). Dans certains cas, *« les agents non titulaires représentent 25% de l'effectif »*. De plus, *« l'augmentation continue du budget du personnel due principalement à l'ancienneté, soit au passage d'un échelon à un autre, dissuade les élus à recourir au recrutement et donc conduit à une maîtrise des coûts du personnel par l'augmentation des emplois précaires »*.

Quant aux choix des bibliothécaires les plus conséquents résultent de l'application des décisions municipales : redéploiement du personnel (*« les agents tournent d'un service à un autre. Le personnel en place comble l'absence du personnel non renouvelé »*), diminution des achats, non-renouvellement des collections, stagnation ou diminution du nombre d'abonnement. Cela représente donc une atteinte probable à la cohérence et à l'exhaustivité des fonds. Dans bien des cas, les bibliothécaires auraient préféré la suppression ou la diminution de services, notamment le service d'animation, afin de préserver les achats de documents. En effet, malgré l'importance confirmée de l'animation pour la valorisation de l'institution aux yeux du public et des responsables de la politique culturelle locale⁵, celle-ci constitue le premier service que la plupart des bibliothèques acceptent ou envisagent de supprimer lors d'une diminution budgétaire, afin de limiter les dépenses.

Le travail en partenariat avec les associations locales et la sous-traitance de certains services comptent parmi les solutions évoquées pour diminuer les dépenses. A ceci s'y ajoute la redéfinition des sources d'achats : recours aux grossistes, soldeurs et clubs, et pression accrue sur tous les fournisseurs afin d'obtenir les meilleures remises. Cependant, l'application de la loi du droit de prêt et par conséquent le plafonnement des rabais à 9% pour les bibliothèques publiques, impose aux bibliothécaires de trouver d'autres alternatives.

Par ailleurs, la création de nouvelles activités rémunératrices paraît presque inconcevable. En revanche, le développement de services payants (expositions payantes du fonds anciens, production de cartes postales des fonds patrimoniaux, location de salles, etc.) et l'augmentation des tarifs d'inscription se développent de plus en plus.

Dans le cas d'une augmentation budgétaire, la tendance est à l'abondance de l'offre documentaire. Maintes décisions ont ainsi été prises sans études préalables ou estimation de la capacité réelle de la bibliothèque pour la création de nouveaux services, pour l'enrichissement des collections ou encore la multiplication des programmes d'animation. Les augmentations budgétaires ne constituent pas nécessairement un facteur garantissant une meilleure offre. Citons, à titre d'exemple, l'accumulation des acquisitions, en dépit du manque de personnel technique, qui dans certaines bibliothèques enquêtées a conduit à la fois à une accumulation de travail mais aussi à la non-disponibilité des documents pour le public. Nous rejoignons Dominique Arot (1997) lorsqu'il constate que « paradoxalement, la progression des budgets des bibliothèques ne semble pas se traduire dans la réalité par une amélioration flagrante du service rendu ».

La pratique de l'évaluation ou les études de besoins sont assez marginales et peu utilisées. D'un côté, les bibliothécaires ont toujours la conviction que leur produit répond aux besoins de leurs usagers, mettant en avant leurs connaissances empiriques. D'un autre côté, une telle pratique managériale requiert du temps, des moyens et un savoir-faire dont peu de bibliothèques disposent.⁶ La tendance à limiter l'évaluation aux statistiques, à la collation des chiffres dans un rapport annuel pour la DLL ou pour la tutelle, domine toujours.

III- La tarification : un choix ou une obligation ?

La question de la tarification semble être tranchée dans les BMVM. 80% d'entre elles ont renoncé à la gratuité. La tarification touche toutes les activités et tous les services offerts. Son apparition a coïncidé avec l'insertion des documents multimédias dans les bibliothèques. Celle-ci a d'ailleurs pu servir de justification dans certains cas à la mise en place d'une politique de tarification. La part des BM françaises dont les services sont entièrement gratuits était de 19,9% en 2000. Selon le tableau suivant, élaboré à partir des données de la DLL, concernant uniquement les villes moyennes, nous constatons que la tarification progresse continuellement dans les bibliothèques.

L'évolution de la tarification dans les bibliothèques municipales des villes moyennes

Année/nbre des BMVM	91/342	92/348	93/357	94/359	95/361	96/360	97/365	98/364	99/361	00/386
BMVM sans droits d'inscription	89	41	66	63	61	56	50	48	52	54
BMVM avec discothèque et/ ou vidéothèque sans droits d'inscription	41	14	28	24	28	27	22	21	27	27
BMVM avec droits d'inscription	253	308	291	296	300	304	315	361	312	332
BMVM avec discothèque et vidéothèque avec droits d'inscription	146	186	182	195	216	220	234	244	249	268

Les divergences décrites à travers la littérature concernant la pratique de la tarification ne semblent plus concerner, sur le terrain, que ses modalités d'application. Seule la révision des tarifs constitue un sujet de discussion. La décision tarifaire, qui se révèle politique, semble être acceptée, parfois soutenue, voire dans certains cas proposée par les professionnels. En effet, l'esprit de la gratuité est de jour en jour affaibli, en particulier chez les responsables politiques, sous la pression d'arguments divers :

- Les services offerts ont un coût et par conséquent ils doivent avoir un prix ;
- Les dépenses pour une bibliothèque sont importantes, il faut ainsi garantir un minimum d'entrées financières ;
- La tarification de certains services communaux représente une alternative, particulièrement pour les villes se trouvant dans des situations économiques difficiles, afin d'obtenir des recettes sans augmenter les impôts locaux et/ou pour maintenir qualitativement et quantitativement les services offerts ;
- La tarification a une signification de qualité et la gratuité dévalorise l'offre culturelle d'une bibliothèque (l'ensemble des services rendus) « *Ce qui ne coûte rien ne vaut rien.* » ;
- L'inefficacité de la gratuité pour élargir les pratiques culturelles ;
- La tarification est un moyen pour ne pas porter préjudice au commerce local (libraire, maison des disques, les cybercafés, etc.) ;
- Faire payer les usagers non-habitants de la ville et donc les non-contribuables ;
- La tarification responsabilise les usagers et les conduit au respect des biens publics ;
- La directive européenne de 1992 et celle du 22 mai 2001 sur le droit de prêt et la loi en faveur de la rémunération des auteurs au titre du prêt en

bibliothèque et renforçant leur protection sociale, entrées en vigueur le 1^{er} aout 2003. Ces mesures ainsi que le plafonnement des rabais engendrent la hausse des dépenses des communes.

Les bibliothécaires légitiment leur consentement à une politique tarifaire par l'accès libre et par la différenciation des prix selon la nature des documents, l'âge et la catégorie socioprofessionnelle des usagers. Des tarifs non-dissuasifs et de nombreuses exonérations en faveur des enfants, des adolescents et des publics défavorisés (chômeurs, bénéficiaires du RMI, etc.) sont appliquées. Une forme de démocratisation de la culture semble , ainsi, être assurée.

Les recettes obtenues, que les tutelles prennent en compte même si elles sont souvent inavouées, sont garanties. Pour maintes bibliothèques (41%), la tarification a permis de couvrir des dépenses et de combler un manque budgétaire. Quelques citations nous paraissent intéressantes : «La discothèque, son budget est équivalent à ce qu'elle rapporte». «Les recettes représentent 15% des dépenses».

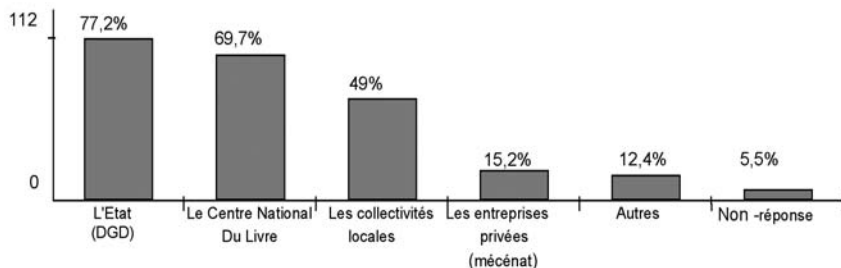
Dès lors, il est vrai que les recettes obtenues sont marginales et incomparables avec les financements municipaux et qu'il est illusoire d'escompter d'une BM une rentrée d'argent à la hauteur des coûts induits, comme le soulignent Dominique Arot et Sylvie Fayet (1994)⁷ mais, elles sont souvent essentielles.

Par ailleurs, toutes les recettes sont reversées à la trésorerie municipale et affectées au budget global de la mairie. Rares sont donc les bibliothèques qui en profitent. Il en résulte de cela que la satisfaction des contraintes et l'atteinte des objectifs d'un acteur se réalise au détriment d'un autre. La réussite d'une politique tarifaire suppose l'adoption d'un compromis entre les usagers (accessibilité), la tutelle (des entrées financières), les professionnels (la compensation des charges de travail).

Les subventions : opportunité ou contrainte ?

De multiples modes de financement et de soutien, de nature financière ou non, peuvent s'ajouter au budget régulier des BM. Les aides extérieures constituent une pratique courante chez presque la totalité des bibliothèques. Seules 5% d'entre elles déclarent ne jamais recevoir d'aides extérieures. Ces aides proviennent de l'Etat (le Ministère de la Culture et d'autres ministères), des autres collectivités territoriales (régions et départements) et/ou du secteur privé (individus et/ou entreprises), d'où les termes de subvention, de mécénat et de parrainage. Le secteur privé reste un champ peu exploité. Les professionnels, et parfois les élus, continuent à manifester une réticence à l'égard des aides privées. Cette réticence est due à leur crainte de dépendance vis-à-vis des donateurs et de leur conception d'un service public « pur ». « *Le service public doit être assuré par l'argent public.* »

L'Etat et les collectivités territoriales demeurent partenaires des BM. Leurs interventions sont représentées essentiellement par la dotation générale de décentralisation (77% des BM enquêtées), par les aides du Centre National du Livre (69% des BM enquêtées) et celles des collectivités locales (49% des BM enquêtées)⁸.



Les aides privées prennent en particulier la forme de dons de livres. Le parrainage commence à peine à rentrer dans les mœurs de certaines villes. Il intervient dans le cas de manifestations culturelles spécifiques ou de grands projets. Le recours à des aides extérieures est important, voire déterminant pour la réalisation de certains projets d'envergure, tels que les projets de numérisation ou d'informatisation. « *Quand il y a arrêt des subventions, il y a arrêt des achats* ». « *Elles ont permis certains projets de ré-informatisation restés en attente* ». « *Elles conditionnent le niveau d'activités* ». Cependant, « *Une aide peut représenter une opportunité qui crée une contrainte* ». Les conditions et les procédures d'obtention s'avèrent lourdes et coûteuses. L'obtention d'une aide engendre des coûts de fonctionnement importants, dus à l'engagement du personnel dans un travail long et exigeant en amont et en aval de l'obtention de ces aides. Comme le décrit Timothy Mason (1986), « la recherche des mécénats est une tâche de longue haleine, souvent frustrante »⁹. Les bibliothèques renoncent à solliciter certaines aides du fait de la participation nécessaire de la mairie, notamment les aides du Centre National du Livre (CNL). Les communes doivent atteindre un certain seuil de dépenses. La bibliothèque doit répondre à des critères portant sur le coût des travaux d'aménagement ou de construction, le personnel qualifié, le budget annuel d'achat de livres et de périodiques, les heures d'ouverture, etc. Dès lors, « *dans le cas où la ville n'a pas beaucoup de moyens, elle ne peut pas espérer grand chose* ». De plus, les conséquences sur l'offre documentaire sont parfois néfastes. Les choix et les priorités sont orientés en fonction des orientations des bailleurs de fonds. Les bibliothèques s'engagent dans des projets d'acquisitions qui ne correspondent pas toujours à leurs politiques documentaires. Les aides du CNL sont encadrées par des thématiques qui ne correspondent pas nécessairement aux orientations des

mairies ou aux besoins réels des bibliothèques. « *C'est vrai que les critères pour lesquels on le fait, correspond souvent aux critères de la DRAC et pour le CNL, on se coule dans le moule de leurs priorités* ». Nombreuses sont ainsi les contraintes dont il est nécessaire d'évaluer les impacts. Nombreux sont par ailleurs les bibliothécaires qui signalent que les subventions obtenues entrent dans la caisse de la mairie et ne s'ajoutent pas à leurs budgets. Ils ne sont guère encouragés à rechercher des sources de financement spécifique.

Il est fondamental d'évaluer les effets de toute aide extérieure et de pouvoir juger de son opportunité réelle.

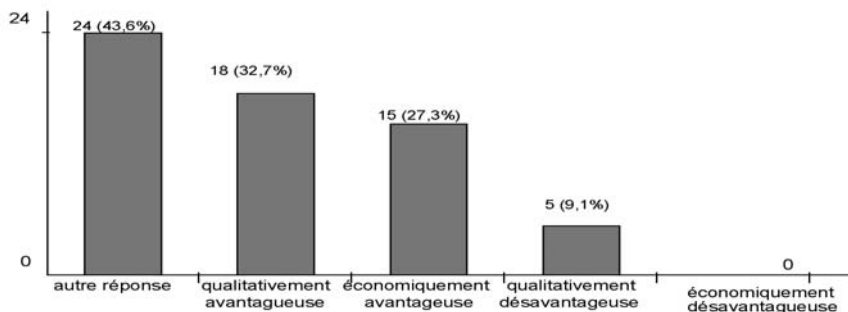
La sous-traitance entre l'économique et le culturel

La sous-traitance est une pratique managériale courante dans de nombreuses BM, presque 38% des enquêtées. Ce pourcentage n'est sûrement qu'une sous-estimation. La deuxième enquête par entretiens a révélé que la pratique de la sous-traitance n'est pas considérée comme telle par certains professionnels¹⁰ et pour d'autres constitue une pratique inavouée.

Elle est pratiquée depuis longtemps pour de nombreuses tâches et reste indésirable pour d'autres. Le traitement physique et intellectuel des documents, ainsi que les animations, sont souvent sous-traités, ce qui n'est pas le de la sélection des documents. Les raisons majeures pour lesquelles les bibliothèques ont recours à une telle pratique diffèrent d'une bibliothèque à une autre, mais elles traduisent pour la majorité un état de carence. D'une part, la sous-traitance apparaît comme une solution pertinente permettant aux bibliothèques de dépasser leurs propres limites, aussi bien matérielles que professionnelles. Elle permet de surmonter le manque quantitatif et qualitatif de personnel, le manque de matériel et d'espace, de continuer à fonctionner normalement tout en s'engageant dans des projets lourds tels que l'informatisation ou la numérisation des fonds et de pouvoir suivre la rapide évolution technologique sans investir dans un matériel qui coûte cher et qui devient vite obsolète. D'autre part, elle offre aux bibliothécaires la possibilité de se recentrer sur le cœur de leur métier¹¹. Elle représente un mode de gestion auquel il serait absurde de renoncer.

Les avantages économiques de la sous-traitance, comme mode de gestion au sein des bibliothèques publiques, sont reconnus. L'évaluation des bibliothécaires exerçant cette pratique (55 bibliothèques) se présente comme suit :

L'évaluation des bibliothèques pratiquant la sous-traitance :



Dans de nombreuses bibliothèques, la diversité et la qualité de l'offre et des services, de même qu'une économie de temps et d'argent, sont assurées. La sous-traitance est un mode de gestion permettant une rationalisation des dépenses de fonctionnement. Un responsable indique qu'il doit à la sous-traitance 20% des économies réalisées sur le budget de fonctionnement. Un autre estime que, bien qu'elle cause la suppression de certains postes, elle permet un gain de temps et une simplification de gestion. D'autres précisent que l'achat des notices bibliographiques revient moins cher que leur rédaction par le personnel interne et que la gestion des périodiques par des sociétés externes ne demande pas plus de frais.

Aussi la sous-traitance donne-t-elle la possibilité aux bibliothèques d'avoir « *un service moins cher et plus rapide et donc une meilleure qualité de service public* ». Le redéploiement du personnel a permis à certains bibliothécaires une grande implication dans des projets qu'ils n'avaient pas le temps de suivre. Il a suscité, pour d'autres, le développement d'autres axes parfois laissés en jachère. Le personnel se libère ainsi des tâches techniques (catalogage et indexation) pour des tâches plus « *intéressantes* », « *plus nobles* », « *plus valorisantes* » (l'accueil du public). Cela contribue à la satisfaction des usagers, à une motivation accrue des professionnels, à une image dynamique et plus positive de la bibliothèque, aboutissant à une meilleure reconnaissance par la mairie.

Toutefois, le recours à des prestataires extérieurs, en particulier privés, continue à être contesté. Ce rejet s'explique par la conviction des responsables politiques qu'ils ont recruté le personnel permettant de prendre en charge toutes les missions de la bibliothèque. Le rejet presque systématique de la sous-traitance par les professionnels des bibliothèques semble dû essentiellement à leur crainte de perdre des postes de travail et de se voir dépossédés du savoir-faire et du contrôle qu'ils exercent sur l'ensemble de l'activité. Elle menace même la création de postes. Elle bloque la professionnalisation des employés communaux et conduit à une perte de com-

pétence interne et à une disqualification du personnel. Les professionnels perdent la mise à jour de leurs connaissances apportées par le travail quotidien et la possibilité d'avancer et d'innover. «*Il est nécessaire que le personnel de la bibliothèque connaisse son fonds*». «*La gestion propre est préférable pour une meilleure approche des collections*».

Le temps de contrôle et d'ajustement du produit sous-traité au profil exact de la bibliothèque, tel que dans le cas d'un ajout de données locales dans une notice bibliographique, aussi bien que le temps d'adaptation, suite au redéploiement du personnel, sont parfois longs. La nouvelle répartition des tâches est parfois contestée. Elle ne satisfait pas nécessairement tout le personnel. Des conflits surgissent.

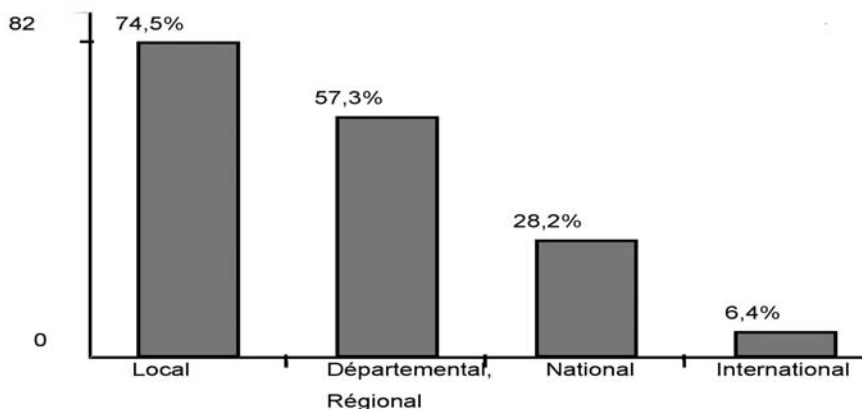
De plus, la sous-traitance est pour certains le prélude à la privatisation. C'est pourquoi ils décrivent le métissage public-privé comme «*redoutable, négatif, dangereux, extrêmement dangereux, impossible, jeu de crétins, pas très sain* ». Dans l'ensemble, le dilemme des bibliothécaires est loin d'être de nature managériale. La sous-traitance a ses atouts et ses contraintes et son évaluation doit être effectuée en prenant en compte ces différents éléments.

En outre, de nombreuses activités font l'objet d'une sous-traitance et en même temps d'une coopération. Il est à noter que 80% des bibliothèques qui pratiquent la sous-traitance pratiquent en parallèle la coopération. Cela touche les animations et la fourniture de notices bibliographiques. Il resterait à préciser l'effet que pouvait avoir la pratique de la sous-traitance sur la pratique de la coopération et *vis versa*.

La coopération inter-bibliothèques: pratique de proximité, raisons et limites

Les bibliothécaires ont depuis longtemps essayé de partager, d'échanger et d'ajouter leurs ressources. La coopération représente en effet un mode de fonctionnement pour trois quarts des bibliothèques. Cependant, elle n'a pas pu encore remédier aux problèmes provoqués par la décentralisation (l'évolution différenciée des établissements de différentes villes). Les projets de coopération s'effectuent principalement au sein d'une ville. Les acteurs locaux (musées, conservatoires, écoles, etc.) continuent à être les partenaires habituels des bibliothèques assurant un maillage géographique plus fin et complétant l'offre d'une centrale et de ses annexes.

Les niveaux de la coopération des bibliothèques municipales des villes moyennes



La préférence déclarée pour une « coopération de proximité » entre les villes dépasse les clivages politiques. La proximité géographique est un élément déterminant pour une coopération, motivée par la facilité d'organisation des rencontres, surtout face aux problèmes de manque de temps et de personnel dont souffrent de nombreuses bibliothèques. Les complexités de la gestion et les risques de subordination peuvent être réduits par le fonctionnement sous la même tutelle, en vue des mêmes objectifs.

Le développement de la lecture au sein d'une commune n'est pas du ressort de ses voisines. La satisfaction d'un public direct (les résidents de la commune), citoyen et électeur, l'harmonisation des projets culturels locaux demeure la priorité des élus et des professionnels. *«Oui pour la coopération au sein de la ville... Elle permet plus de cohérence dans les programmes culturels».*

Une action culturelle communale cohérente permet d'assurer et de diffuser une meilleure image de marque de la ville. Elle est en effet le fruit d'une coopération de l'ensemble des institutions culturelles de la ville. Une participation active de la part de la bibliothèque ne peut qu'augmenter sa notoriété par rapport à sa tutelle. Le repli sur soi-même ou l'appel au partenariat au niveau local et parfois départemental ou régional mais sous une forme associative, non institutionnelle restent, dès lors, les attitudes les plus courantes. Même l'intercommunalité n'a pu apporter que peu dans le domaine de la bibliothéconomie.

« A partir du moment où on peut s'équiper et fonctionner, c'est quand même plus facile à gérer que quand il y a plusieurs communes qui gèrent la même chose. On ne peut pas forcément avancer rapidement dans les décisions».

Les projets de partenariat sont souvent présentés comme un système d'obligation pesant, une gestion lourde et une surcharge de travail inutile dès l'instant où l'usager

local est satisfait. « ...*Je dis si nous arrivons à répondre aux besoins de nos usagers, je ne vois pas pourquoi avoir recours à la complexité de la coopération* ». »

En outre, l'existence des réseaux informatiques inter-bibliothèques à étendue géographique plus large (en dehors de la commune) est encore embryonnaire. Le passage en réseau, notamment autour d'une base de données bibliographiques commune, est souvent subordonné, d'une part, à un investissement matériel et humain lourd dont beaucoup ne peuvent se doter et d'autre part, à des sacrifices imposés à l'un ou à l'autre des partenaires sur la base d'un ensemble de règles normalisant le partage, jugé accablant pour certains.

De plus, l'apparition d'Internet et de la norme Z39.50 permettant un accès par le web aux catalogues des différentes bibliothèques, a mis en cause un tel regroupement. «*Avoir un portail web commun qui va mettre à la disposition des gens la possibilité d'accéder simultanément aux fonds des différentes bibliothèques ...est la forme de coopération la plus adoptée actuellement.* » L'avenir des simples réseaux bibliographiques, le regroupement des bibliothèques, uniquement autour d'une base bibliographique sans autre possibilité, est à repenser face aux nouvelles technologies d'information. « *Il est toujours raisonnable d'avoir un réseau bibliographique mais autour d'une base de données bibliographique spécialisée sur des domaines ciblés.* »

La coopération « traditionnelle », sous forme de rencontres et de discussions dans un contexte fraternel et non institutionnalisé, paraît être la forme de coopération adéquate et préférée des professionnels. Leur raisonnement reste principalement focalisé sur les nouvelles obligations à assumer et sur le surcroît de travail que la coopération engendre. En effet, la réussite et l'émergence d'un tel mode de gestion semblent fortement liées au facteur humain. Elles restent tributaires de la bonne volonté et de la disponibilité du personnel ainsi que de la nature des relations interpersonnelles au sein de la bibliothèque et des relations avec les partenaires. Cependant, l'acceptation de la coopération devrait principalement être déterminée par rapport à l'intérêt économique et informationnel qu'elle présente.

Conclusion

De l'ensemble des résultats obtenus, il ressort que les décisions des BM reposent rarement sur un raisonnement gestionnaire. La façon dont les professionnels gèrent leur établissement relève plus de l'intuition, du parti-pris, que d'une véritable rationalisation économique. Sur la base de ce constat, l'élaboration des outils d'aide à la décision s'impose. Les bibliothèques ont fait la preuve de leur utilité sociale, il leur reste à devenir un service public plus performant.

Notre travail trouverait son aboutissement dans l'élaboration d'un outil d'aide à la décision, « une grille d'évaluation » qui permettrait aux décideurs de juger de l'opportunité réelle de leurs choix dans le domaine de la gestion des bibliothèques.

La constitution de cet outil a commencé par la définition de l'ensemble des composantes d'une bibliothèque. La bibliothèque peut être définie comme : l'ensemble des moyens matériels et humains auquel s'ajoutent des composantes immatérielles qui se dégagent de l'ensemble des travaux sur le management des organisations, à savoir la finalité ou la mission, la stratégie et les méthodes de travail, la culture, le relationnel et le capital de connaissance.

De plus, la bibliothèque s'identifie aussi par son activité de service, constituée de deux sous-systèmes en interaction :

- un sous-système de préparation et de maintenance du service ou l'ensemble de tâches s'effectue loin de l'utilisateur, nommé base arrière ou chaîne documentaire
- un sous-système de réalisation du service et donc de l'offre de service, qui pour se réaliser, nécessite des rapports directs avec les usagers.

Aussi la bibliothèque se trouve-t-elle en relation avec un ensemble d'acteurs avec lesquels elle interagit pour fonctionner et qui représente son environnement externe. Il s'agit de son organisme de rattachement, ses bailleurs de fonds, ses partenaires et concurrents.

Par la suite, afin d'évaluer les effets de chaque choix managérial, nous avons élaboré un ensemble de questions pour chaque composante. Ces questions ont été élaborées à partir des atouts, contraintes et inconvénients recensés pour chaque choix. Le regroupement et la rédaction de l'ensemble des éléments de réponses impliquent, donc, le repérage des avantages et des inconvénients du choix managérial et permettent dès lors la possibilité d'examiner sa pertinence réelle et d'identifier ses conditions de succès.

Notre grille d'évaluation vise à développer une démarche de diagnostic permettant aux professionnels une analyse attentive et la plus exhaustive possible de l'ensemble des conséquences d'un choix managérial. Elle constitue un support d'information structuré qui peut servir de repère pour l'ensemble des acteurs en présence aussi bien l'ensemble de l'équipe de la bibliothèque que la tutelle.

Notes

1. Laurence Tarin .- des lecteurs aux élus.- In : ABE, n° 179, 1998, p 56
2. Anne Marie Bertrand .- Les bibliothèques municipales : acteurs et enjeux .- Paris : éd du Cercle de la librairie, 1994, p52
3. Une ville moyenne, selon la DLL et l'association des maires des villes moyennes, est une ville dont le nombre d'habitants varie entre 20 000 et 100 000 habitants.
4. Notre première enquête s'est étalée sur une période de quatre mois. Elle a débuté en décembre 1999. Sur les 352 bibliothèques sollicitées, nous avons reçu 163 réponses, dont 145 exploitables, soit un pourcentage de réponses effectives de 41,19%. Notre deuxième enquête par entretiens s'est déroulée tout au long du second semestre de l'année 2001.
5. Selon une enquête de F. Rouet sur les bibliothèques municipales (1998), il constate que 20% des usagers des médiathèques sont intéressés par les animations.
6. Aline Girard-Billon .- La mise en œuvre des indicateurs de performance dans les bibliothèques de lecture publique : bilan et perspectives .- In :Mieux évaluer, mieux gérer, journée d'étude, ENSSIB, 15 juin 1999, 37p
7. Dominique Arot, Sylvie Fayet .- Les budgets des bibliothèques publiques : du désir à la réalité .- in : BBE, n°3, 1994, pp20-29
8. Le regroupement de ces pourcentages dépasse les 100% étant donné qu'une bibliothèque peut avoir plusieurs sources d'aides. Elle peut bénéficier d'une subvention de la DRAC et du CNL en même temps, etc.
9. Timothy Mason .- Le financement de la culture en Ecosse : un système d'économie mixte.- In : Economie et culture : culture en devenir et volonté publique.- Paris la documentation française, 1988, pp 145-150
10. A titre d'exemple, ils ne considèrent pas l'achat des notices comme une opération de sous-traitance.
11. Il est à noter que la définition du cœur du métier provoque encore des polémiques au sein du corps des professionnels. Les activités constituant le cœur du métier sont le traitement intellectuel des documents pour certains et le contact avec le public pour d'autres.

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Résumé

La bibliothèque municipale face aux fluctuations financières : l'impensé managérial dans les bibliothèques françaises des villes moyennes

Le secteur culturel est connu pour sa fragilité économique. Ainsi les bibliothèques, souvent les premières sacrifiées au nom de la contrainte budgétaire, rencontrent régulièrement des problèmes financiers avec lesquels elles doivent composer. Elles sont alors amenées à introduire des changements, à adopter de nouvelles approches et méthodes de gestion.

Nombreux sont les choix et les modes de gestion alternatifs qui se présentent aux décideurs. Ils peuvent opérer un repli et tenter de faire face aux changements budgétaires par des remaniements internes. Ils peuvent décider de tarifier les services pour assurer des rentrées financières. Ils peuvent aussi préférer se tourner vers l'extérieur : pour rechercher des aides, de nature financière ou autre; pour mettre en commun certains services et ressources avec d'autres organisations et donc pour coopérer ; ou encore pour confier en sous-traitance certaines tâches à une entité indépendante publique ou privée.

Notre enquête sur les bibliothèques françaises des villes moyennes montre que l'ensemble de ces choix gestionnaires est mis en œuvre. Les raisons sont multiples et varient d'une bibliothèque à une autre. Mais les décisions reposent rarement sur un raisonnement gestionnaire. Les outils et les démarches de management restent encore des concepts ambigus pour les professionnels. Pour nombre d'entre eux, il subsiste une inadéquation entre la culture et l'économie. Dès lors la façon de gérer leur établissement relève plus de l'intuition, du parti-pris, que d'une véritable rationalisation économique.

Sur la base de ce constat, ce travail se conclut sur la proposition de construction d'un outil d'aide à la décision qui permettrait aux décideurs de juger de l'opportunité réelle des choix qui s'offrent à eux dans le domaine de la gestion des bibliothèques.

Summary

The cultural sector is known for its economic fragility. Thus, being the first sacrificed because of the budgetary constraint, the libraries are regularly face financial problems with which they must adapt. Libraries have therefore to introduce changes, to adopt new approaches and methods of management.

Decision makers have many alternative choices and methods of management. They can either drawback and try to face the budgetary changes by internal rehandlings or they can decide to tariff the services to ensure of the financial re-entries. They can also prefer to seek financial and other kinds of assistance from outside ; to share certain services and resources with other organisations and thus to cooperate ; or to entrust in subcontracting certain tasks to a public or private independent entity.

Our investigation into the French libraries of the average cities (of 20 000 to 100 000 inhabitants) shows that all of these administrative choices are implemented. The reasons are multiple and vary from one library to another. But the decisions seldom depend on managerial reasoning. Managerial tools and actions still remain ambiguous concepts for the professionals. For a number of them, there remains an inadequacy between culture and economy. Consequently, the way of managing their establishment relies more on intuition, bias, than on a true economic rationalisation.

On the basis of this report, this work concludes on the proposal of the construction of a decision-making aid tool which would allow the decision makers to consider the real opportunity of the choices they have in the field of library management.

Evaluation of libraries: Experiences from applying a method for non-market valuation developed in economics

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The context of my study “The Value of Public Libraries” is two major challenges for the libraries today: 1) the effects on libraries and library use of the digitisation in society, and 2) the continuing economic pressure on public budgets generally and library budgets specifically. These challenges are studied from different angles within library and information science, varying in both theoretical perspective and methodology.

Some studies explore the impact of various aspects of public library activities, such as the impact of reading, of information technology access and end-users services, or community projects. Other studies investigate the impact of public library services on special groups, on social excluded, low achievers, and groups such as children, youth, elderly, persons with disabilities, foreign language speakers, etc. In addition, there are studies exploring the overall or social impact of public libraries (Linley and Usherwood, 1998).

My doctoral project supplements this last subgroup of research and goes one step further, aiming at measuring of the overall value of the Norwegian public libraries (Aabø, 2005). The economic situation in the public sector continues to be restrained and the controversy of how to prioritize public funds hardens. In this situation, it seems necessary to determine the value of public libraries in monetary terms. To be able to estimate this value, it was relevant to turn to methodologies developed in economics. The starting point is the economic concept of value.

Economic value

Economic value “[...] which is not synonymous with financial or commercial value, although it is ultimately expressible in terms of either a numeraire good or (preferably) money – comprises any direct use value of the cultural good or service

in question, plus whatever non-market values it may give rise to,” states David Throsby (2003, p. 279), nestor of the cultural economics research area. It is the economic value of public libraries in this sense that my dissertation seeks to explore.

The fundamental monetary measures of value in economics are based on substitutability and can be expressed in terms of willingness to pay (WTP) or willingness to accept compensation (WTA). The economic concept of value has its foundation in the theory of modern welfare economics and is related to choice. Based on, and constrained by, his or her economic situation each individual can choose to consume private, public and other non-market goods, including library services. The trade-offs that people make as they choose less of one good and substitute more of another reveal something about the values people place upon these goods.

My project seeks to find ways to estimate the value of public libraries from the perspective of the general population. The aim of the empirical study is to measure the value of Norwegian public library benefits to the citizens in monetary terms and thus determine if their benefits outweigh the costs of providing them. This will establish whether or not the general public finds the public libraries worth their price. In addition, the study attempts to elicit motivations - why do Norwegians, both users and non-users, value public libraries? The purpose is to provide a better understanding of the total value of public libraries and demonstrate their instrumental value as well as their democratic and cultural value. We must here bear in mind that the study is based on a valuation by citizens. Expert views of the value of public libraries and political aims and visions for their activities formulated by the authorities are not considered here.

Economic analysis relies in most cases on market prices as a first approximation to relative values. Since library services are not exchanged in markets as private goods and have no market prices, that approach is inoperable here. Information on demand and benefits can instead be obtained through methods for valuing non-market goods which have been developed in economics for application to the environmental, health, education, and cultural sectors. Approaches for valuing non-market goods make it possible to achieve estimates of how the citizens value such goods. If one is able to monetize the non-market benefits of public libraries, these benefits can be balanced against the costs.

The CV method

The contingent valuation (CV) method is a direct and explicit method using surveys to value public goods. The method circumvents the absence of markets for public goods by presenting the respondents with a hypothetical market, in which they

have the opportunity to ‘buy’ or ‘bid for’ the goods in question. The CV method is based on the individual’s own assessment of the goods to be valued. The technique aims at eliciting people’s willingness to pay in money for a change in the provision of a non-market good. It has been applied in valuing various cultural goods (Noonan, 2003), such as museums and theatres and also libraries (Harless and Allen, 1999; Holt et al., 1999).

There are, however, difficulties in implementation of methods based on constructed markets owing to their reliance on expressed intent and to hypothetical and not to real behaviour. A main objective is therefore to bring respondents’ intentions as closely as possible in line with their probable actions. The description of the scenario where the valuation is going to take place is critical. Careful considerations are necessary in designing the scenario in a CV study which consists of three main components:

- 1) The choice setting in which the respondents are to imagine themselves, with questions eliciting their WTP or WTA for the goods to be valued.
- 2) Information on the paying vehicle and the decision rules for whether or not the proposed change will be carried out.
- 3) Questions about the respondents, e.g., socio-economic characteristics, use or non-use behaviour and attitudes concerning the goods to be valued.

The Norwegian study

The scenario design in my empirical study of the value of Norwegian public libraries is based on experiences from two pilot studies to test the scenario plausibility. The WTP scenario describes an economic situation which forces local politicians to suggest a choice between closing down the public library, or increasing the local taxes. The WTA scenario has the same framing, but here the choice for the local politicians is between closing down the local library in order to use the saved budget funds on education, health or other municipality tasks that benefit the household, or maintaining the library and also the other municipality tasks at level of activity of today.

The scenario description starts by referring to the Norwegian Public Library Act and its purpose statement, saying that ”the task of the public libraries is to promote enlightenment, education and other cultural activity by making books and other material available free of charge to all those who live in Norway” (§1). The choice situation is then described:

“It is well known that the economic situation in most of the municipalities is deteriorating. This can imply that some public services have to be reduced or closed down, unless the revenues of the municipality are increased.

Assume that the Public Library Act has been amended so that the municipalities themselves could decide whether or not they wanted a public library. Imagine that the council administration was considering closing down the library. An option would then be to use the public library in a neighbouring municipality or for you to buy all books, reference manuals, information services, etc. needed by yourself and your household. Library services to schools and adult training courses and to various groups in the local community, such as the "Reach Out"-service to elderly in institutions, kindergartens, etc. will cease to exist.

Another alternative is maintaining the library services on the understanding that the revenues of the municipality are sufficiently increased through additional local taxes."

The survey was administered by a professional opinion company as part of their bimonthly omnibus survey that collects data from a national random sample of private households. 999 persons over the age of 15 years were interviewed in their homes as representatives of their households.

The first part of the questionnaire used a top-down design, starting with a description of overall services at the municipal level, moving down to cultural goods, and then to public libraries. The intention was to put libraries in a context of more general local public goods and indirectly remind respondents of the budget constraint whereby other goods and services compete for scarce private and public resources.

The question of property rights to a non-market good is important. To illuminate the issue of perceived property rights to public library benefits we posed the following question: "Do you think you have a right to have access to a public library in the municipality where you live?" The answers were almost unanimous: 94 % saying "Yes", a much higher fraction than those who stated that they were library users, which in our study was 60 %. This unambiguous result and the importance of the property rights question in non-market valuation have implications for the value estimate of the Norwegian public libraries.

All respondents were posed two valuation questions, half of the sample were asked WTP questions, the other half were asked WTA questions. The research design yields independent valuation estimates based on different model variants. A range for the valuation of their public libraries by the general population can be ascertained from these estimates. The lower bound of the range, based on WTP estimates, is close to the average annual library costs per household in Norway, 400 Norwegian Crowns (NOK), and a conservative upper bound, based on the WTA estimates, is five times higher, 2000 NOK. Owing to the choice situation in this study the popula-

tion's "true" value is reasonably closer to the upper bound. For public goods to which the citizens perceive they have strong property rights, the WTA estimates are extra important (MacDonald and Bowker, 1994).

The overall conclusion from the empirical study is that, on the average, Norwegian households clearly value the benefits from public libraries higher than the costs of providing the library services, demonstrating a cost-benefit ratio of approximately 1:4. In other words, for each NOK of taxes that is used on public libraries, the general population gets four times back in benefits. This does not mean that all the public libraries of the 433 Norwegian municipalities have a positive net value. The estimate is an average implying that some municipal libraries have a higher value and others a lower, giving room for improvements. At the national level, however, the Norwegian public libraries definitely have a net value.

Motivations

The study seeks to elicit the respondents' motivations for valuing public libraries. Approximately 40% of the total valuation is justified by own and close family's direct library use, 20% by their future library use (option value) and 35-40% by non-use values, motivated by appreciating other persons' library use; the libraries' dissemination of literature, culture and knowledge; and promotion of democracy and equality. A substantial part of the value of the public libraries is thus motivated by their social and cultural benefits. The majority of respondents are motivated by both self-interest and benefits accruing to others and the community. This blend of motivations is an important finding and may be interpreted as reflecting the standing of the public library of today as a community institution.

Summing up

The need to document public library value is apparent owing to continuing economic pressure on public budgets. This study is the first CV study for the valuation of public libraries at a national level, in Norway and internationally. Based on empirical data, a cost-benefit ratio of about 1:4 is established, concluding that the Norwegian public libraries are, overall, well worth their price as viewed from the perspective of the general population.

An overwhelming majority of the population perceive they have property rights to their municipal public library. Both library users and non-users find that public libraries have value and the majority are motivated by social and cultural interests as well as self-interest, demonstrating that municipal libraries have characteristics of being public goods.

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Abstract

In a situation characterized by a growing pressure on public budgets, most public institutions are under increasing pressure to document their value. Libraries are no exception in this respect and the situation is reflected in library research. From different theoretical and methodological positions researchers are striving to develop instruments, which will make it possible to make valid statements about the value of libraries. Within the social sciences, economists have developed the most sophisticated methods for determining the value of non-market goods.

In a recent Norwegian research study to value the public libraries in Norway, we discuss the fruitfulness of and some problems connected to making use of methods developed in economics for evaluating non-market goods when trying to determine the value of public libraries. The purpose is to provide a better understanding of the total value of a library, both its use and non-use values, as viewed by patrons as well as by non-users and potential users in the library's environment. By surveying a representative sample of the library users and non-users and aggregate the individual preferences, an estimate of the library's total value in the organisation can be reached.

We have conducted an empirical study of Norwegian public libraries applying one such method, the contingent valuation. In this study, the value of public libraries' benefits was compared with the costs of providing them, thus exploring whether they had a net value. Results from the study show that the benefits from the libraries are clearly higher than the costs to provide them library services. The research project explores the possibility of fruitful use of the contingent valuation method in evaluation of different types of libraries. Crucial for the success of the method is the construction of a scenario and a survey instrument that can measure the value of the actual library in a valid way. Based on theoretical discussions and empirical data we conclude that such approaches developed in economics can contribute to the theoretical and methodological arsenal of library and information science. This paper gives a brief presentation of the Norwegian study.*

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Customers Value Research

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Customer Value Research

There are a variety of ways and means of obtaining feedback from customers and there is no right or wrong way to do this. However, we ought to be obtaining customer feedback because:

- Customers matter – libraries are service organisations and should understand and respond to customer needs
- Library staff make assumptions about what customers require, and these assumptions are not always accurate
- If library management does not know where to put resources (staff and funds), the result can be a waste of time and effort without adding any value to the customer's experience
- Acting upon the feedback from customers can be a powerful tool in achieving cultural change within an organisation, to make it more customer focused and responsive
- Monitoring the action plans that are developed in response to customer feedback enables performance monitoring and encourages a culture of continuous quality improvement.

Customer Value Research, based on Customer Discovery Workshops and Interactive Value Modeling, is an ideal methodology to use to gauge customer satisfaction where service improvement is necessary and where it is vital to engage library staff in the change process that will result. However, this methodology is not helpful if the customer satisfaction research is to be used, primarily, for across industry benchmarking, as the results of the research is valid only for that particu-

lar library service and cannot be used for direct comparisons with other library services.

Which Customers?

In an academic library, there are many customer segments and all, if asked, will give slightly to vastly different value elements. Therefore, it is most important to first identify these customer segments. Then a choice is made, based on strategic decisions, as to which customer segment or segments are engaged in the customer discovery research process.

The comparisons in this paper relate to undergraduate on-campus students and academic staff. Details of other customer segments from the Australian university are available – off-campus students, researchers, executive stakeholders – but have not been included in this paper as comparative research has not been undertaken in the UK context.

The Hierarchy of Value

The methodology used in the Customer Value Research is predicated on a simple model or hierarchy of value. At one end the customer is angry. At the other end of the spectrum, the customer is delighted by the unanticipated services that are available to them in their interactions with library staff, services and resources. In between, there are gradations of irritation and satisfaction based on the perceptions and needs of the customer. The hierarchy includes: Angry, Irritated, Frustrated, Basic, Expected, Desired, and Unanticipated.

The model does not give a total level of satisfaction, but shows that in all complex services, sometimes we annoy customers and sometimes we delight. The total value is derived by taking away the irritation factor from the delighted (value) factors and deriving a total score of 'value'. Using a simple example, a customer seeking information for an assignment may be irritated by an inconsiderate staff member who spoke off-handedly, but pleased that they were able to obtain the information they needed. The net value to the customer would be the 'value' of the information minus the 'irritation' of the rude staff member.

There are some services that libraries undertake that fit into the BASIC category. For customers of a traditional library, a BASIC service would be being able to find information by way of physical books and journals. Increasingly, in a modern library, they are EXPECTING to have access to a range of electronic information resources as well. In a lending library, being able to borrow items would be a BASIC service. So, if we deliver on these 'basic' services, the customer is neither annoyed nor delighted – simply they got what the believed/perceived would be available.

A customer's perception is their reality. So, it is important to understand their perceptions and to adjust service provision accordingly. A customer who believes that inter-library loan services are not available, when these are, is really telling library management that information about that service is not well communicated.

Customer Value Research – The Process

The initial process involves conducting “customer discovery workshops” where customer groups (undergraduate, postgraduate coursework, postgraduate research, off-campus, academic staff etc) participate in facilitated workshops. (The methodology is owned and facilitated by consultants, Enzyme International, which is based in Sydney and London.)

In the first part of the customer discovery workshops, the participants use a workbook sheet to identify and rate, in silence and individually, the irritants that they perceive about the existing services. This way, the issues are identified but there is no opportunity for “group think” and “one-upmanship” relating to problems experienced because there is no open discussion of the irritants in the workshop. The participants appreciate the opportunity to have their say about problems and these comments are gathered immediately for analysis after the workshops.

Then the participants are led through a visioning exercise, where they are asked to imagine a time, three to five years on, when they have been successful in their endeavors at university, and they are asked to identify what services, provided by the Library, helped them achieve their success. Wireless keypads are used to capture the customers responses (votes) using Option Finder technology. This exercise, through a prioritising process involving forced pairing, leads to the identification of the services and resources that are most valued.

The participants are then asked to rate the current performance of the library in delivering the identified services. This results in a hierarchy of value elements and a gap analysis on perception of current performance, which is later analysed to identify strategies to close the gaps. The gap analysis between what is important and the customers' perception of current performance is very useful. High performance on a lowly rated value factor might indicate over servicing; poor performance on a highly rated value factor would be a priority area for immediate remedial action to improve performance.

During the workshop, a small group of library staff observe proceedings in silence. They also vote as to how they expect the customer to vote, thus testing assumptions about what is and is not important.

By involving Library staff in this customer research (actively listening to workshop participants and providing an opportunity to follow up issues raised at the lunch at the end of the workshop), by seeking their analysis of the research findings

on what adds value for the customer and what are the irritations, and by their participation in teams established to define what change is required within the organisation to deliver the customer value package, we create an internal environment that is not only ready for change, but which is driving the change from the ground up. Rather than imposed from management above, change is driven by the customer value propositions and the staff involved in implementing the change. In this way, there is a much greater chance of staff “buy-in” and the change process is much more likely to be successful and sustaining.

It is very important to follow up the participants in the focus groups with a note of “Thanks” for their participation and to provide a summary of the outcomes, the value propositions that were derived from the customer discovery research. That way, they know that their participation was appreciated and that the library has taken notice of their opinions.

Once library staff have analysed the customer research data and identified appropriate actions to either reduce the irritants or improve the value, it is very important to communicate the changes that are happening as a result of the customer discovery research. This can be done on a regular basis, via articles in the University’s newsletter, in reports to Faculty/College and School Board meetings, to the Library Committee and Academic Board. In this way, the communication reinforces the link between customer values and actions and clearly demonstrates that the library is not only listening to the people it serves, but also acts upon what is conveyed to us. The communication is not all outwards, but also into the library. The library’s operational plan, incorporating the agreed actions to reinforce value elements and to reduce irritants, reminds library staff of the connection between customer value propositions and their individual actions.

Having identified the customer value propositions, it is not necessary to undertake comprehensive discovery workshops every year. Rather, I have found that an annual validation exercise, where the hierarchy of values and irritants are tested by way of an online survey, is all that is necessary. Value propositions, in my experience, tend to remain more or less static, whereas the irritants change as improvements to services remove or decrease the degree of irritation experienced.

The results of the customer discovery workshops, the value propositions, have been validated by statistically significant student satisfaction surveys in the UK university. Over 3,400 students participated in an online satisfaction survey and produced no new value factors, or irritants, than the discovery workshops that involved approx. 60 students.

The Customer Value Propositions

Understandably, the customer value propositions vary depending on the market

segment. It is possible to aggregate the results from the different customer segments to develop an overall hierarchy of values as well as retain the results for the particular cohorts. Below are the hierarchy of values and irritants by two major customer segments, undergraduate students and academic staff, with 1 being the most important or most irritating. There are differences in emphasis between the needs of academic staff and students as evidenced by the different weightings for similar value factors, and by the inclusion of different value factors for each segment. However, the overall results are very similar.

Table 1: Sample Library Value Factors - Australian and UK Students

	Australian Students - 2002	UK Students – 2005
1	Relevant, current, accessible book collection	Easy access to materials where and when I need them
2	Easy access to more online Library resources	Inspiring environment which supports diverse needs
3	Sufficient copies of key texts	Comprehensive available relevant resources
4	Approachable, knowledgeable, competent staff	Knowledgeable friendly accessible staff who help me
5	Access to and availability of journals	Good quality cheap photocopying and printing
6	Affordable, flexible and reliable photocopying and printing	Availability of reliable up-to-date technology and facilities
7	Reliable, up to date IT computer support	Timely targeted training
8	Timely access to Library staff and online help	User friendly loans policies and procedures
9	Environment conducive to study	Opening hours which meet user needs
10	Adequate opening hours	Services clearly communicated to users
11	Clear signage	Proactive partnerships between academic staff and library staff

Table 2: Sample Library Value Factors - Australian and UK Academic Staff

	Australian Academic Staff - 2002	UK Academic Staff – 2005
1	Current relevant comprehensive collection	Easy access to materials where and when I need them
2	Reliable electronic access	Comprehensive available relevant resources
3	Access to material in other libraries	Knowledgeable friendly accessible staff who help me
4	Sufficient funding to maintain free core services	Proactive partnership between academic staff and library staff
5	User friendly accurate catalogue	Inspiring environment that supports diverse needs
6	Easy reliable access to resources and services	Opening hours that meet user needs
7	Competent friendly proactive staff	Managing multi-media and curriculum content
8	Timely responsive service	User friendly loans policies and procedures
9	Flexible borrowing system	Good quality cheap photocopying and printing
10	Environmentally responsible	Availability of reliable up-to-date technologies and facilities
11	Adequate opening hours	Timely targeted training
12	Services clearly communicated	Services clearly communicated to users
13	Good physical environment to support learning and research	
14	Effective library skills training	

Table 3: Sample Library Irritant Factors – Australian and UK Students

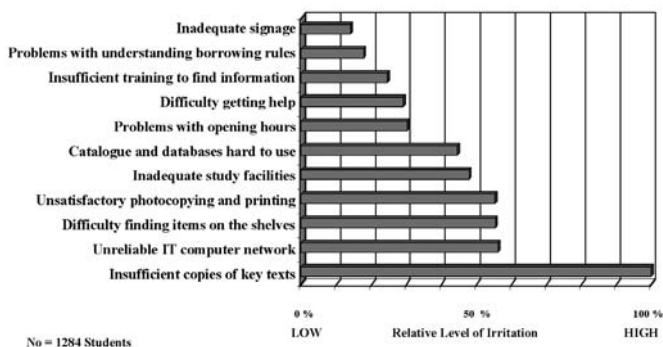
	Australian Students - 2001	UK Students – 2005
1	Difficulties with photocopying and printing	Inadequacy of the collection and its management
2	Problems with loan system and service	Inadequate expensive photocopying and printing
3	Insufficient copies of key texts	Noisy, inappropriate study environment
4	Difficulty in locating items in the physical collection	Unreliable and limited IT and AV
5	Insufficient training in library skills	Can't find material I need
6	Inadequate, noisy study areas	Restrictive and difficult loans policies and procedures
7	Difficulty in accessing online information	Unhelpful uninterested staff
8	Unreliable IT	Queuing for service
9	Problems with opening hours	Don't like card access policies
10	Inadequate signage	Problems with catalogue
11		Lack of training and support when I need it
12		Inadequate opening hours
13		Inadequate academic liaison and communication

Table 4: Sample Library Irritant Factors – Australian and UK Academic Staff

	Australian Academic Staff - 1999	UK Academic Staff – 2005
1	Materials not where they're supposed to be	Inadequacy of the collection and its management
2	Difficulties with technology and electronic access	Noisy, inappropriate study environment
3	Collection inadequacies	Inadequate academic liaison and communication
4	Problems with the catalogue	Unhelpful uninterested staff
5	Inadequate library skills training	Restrictive and difficult loans policies and procedures
6	Difficulties with printing and photocopying	Inadequate opening hours
7	Poor physical environment	Can't find material I need
8	Limited hours of access	Problems with the catalogue
9	Service delays	Inadequate expensive photocopying and printing
10	Poor communication and feedback	Lack of training and support when I need it
11	Poor staff service	Unreliable and limited IT and AV
12	Unsatisfactory loans rules	Don't like card access policies
13		Queuing for service

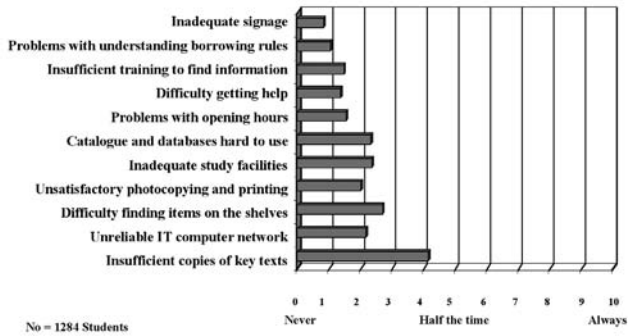
The software, *OptionFinder*, which is used in the workshops to gather the input from participants, produces the rankings in a variety of formats. For instance, the hierarchy of student irritants is expressed as:

Hierarchy of Irritants - Students



The frequency of irritation is important to ascertain the extent of the problem, as demonstrated here. Insufficient copies of key texts is very, very annoying (the most important irritant), but occurs less than half the time students seek text books in the library.

Hierarchy of Irritants – Students – Frequency

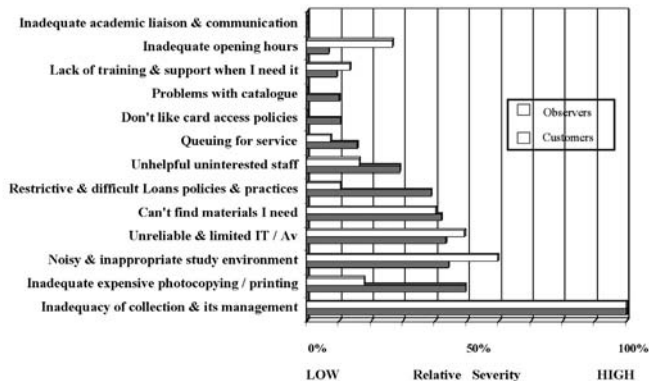


It is clear from the lists of irritants that not all issues identified fall into the responsibility of the library. For instance, the Library does not provide the University’s network environment. However, it does have a responsibility to pass this information on to the relevant areas of the University to try to influence future decision-making.

There is often a close correlation between value factors and irritants: Students value “easy access to materials” and find “materials not where they are supposed to be” an irritant; they value “Up to date complete comprehensive relevant materials” and are irritated by “Collection inadequacies” and “Out of date materials”.

The gap analysis is important in confirming or challenging the perceptions held by library staff. In many instances, staff are not accurate in predicting how the customers will vote. This, if left unchallenged, could result in energy and resources being spent on areas that do not add value or significantly lead to improved customer experiences.

Students Hierarchy of Irritation - Gaps



Value Modelling

After consolidating all the data from the customer discovery workshops, library staff are brought together in a final workshop to consider actions that would either reduce irritants and/or improve value factors. They estimate realistic improvement targets for those values and irritants and, using the *ithink* software, can plot the likely changes in customer satisfaction. This way, library staff and management can see if the effort is worth the benefit, and this improves the quality of decision-making.

It is not possible in this paper to fully describe the value modeling exercise, and the capabilities of the *ithink* software. However, this method of customer satisfaction modeling rates overall performance between positive and negative 100. This is because the total value of all the irritants is subtracted from the positive value factors. This does make the overall score more difficult to explain to stakeholders, who are used to seeing a ‘satisfaction rate’ of a percentage, e.g. 70%. Using this model, a positive score of 30 is considered successful, as there will always be things that annoy the customer, however good the service is. The aim, over time, is to make sure that the irritant factors are not critical aspects of the service delivery. For instance, it would be ‘better’ to have customers complaining about the air conditioning of a building than about the quality of the reference service.

Having identified the irritations and value factors, it is very important to act on the findings as quickly as possible, so that customers and library staff see the benefit of the exercise and the commitment of management towards customer-focused services. The following table outlines the immediate steps taken by the UK library service as a means of reducing the irritation factors while, with the same strategies, improving value to customers.

Table 5: Steps taken by UK University Library to reduce irritants and improve value

IRRITANT (VALUE)	ACTION
<ul style="list-style-type: none"> • Inadequacy of the Collection and its management • Cannot find materials I need • Problems with the catalogue • (<i>Easy access to materials where and when I need them</i>) • (<i>Comprehensive, available, relevant resources</i>) 	<ul style="list-style-type: none"> • Secured increased budget for information resources • More e-resources licensed • Weeding of out-dated items; re-spacing collection • Reclassification of collection to one schema to simplify navigation • New library management system with friendlier user interface to the catalogue • E-reading list project planned • Digitisation of Short Loan items project planned • Purchasing additional copies of textbooks

<ul style="list-style-type: none"> Noisy inappropriate study environment <i>(Inspiring environment that supports diverse needs)</i> 	<ul style="list-style-type: none"> Emphasis on making Silent Study Areas 'SILENT' Submissions to Estates for major capital works Refurbishment of suburban campus library over Summer vacation 2005
<ul style="list-style-type: none"> Inadequate and expensive photocopying and printing <i>(Good quality cheap photocopying and printing)</i> 	<ul style="list-style-type: none"> New multi-function devices installed Reduced costs Colour copying facilities provided at each campus
<ul style="list-style-type: none"> Restrictive and difficult loans policies and practices <i>(User friendly loans policies and procedures)</i> 	<ul style="list-style-type: none"> Revised and more generous loans policy Revised and more consistent inter-library loans policy and practices Implementing loans policies consistently on all campuses
<ul style="list-style-type: none"> Unhelpful, uninterested staff <i>(Knowledgeable, friendly, accessible staff who help me)</i> 	<ul style="list-style-type: none"> All staff reminded of importance of a welcoming environment Increased budget for staff development Introducing Performance Development and Review to help capture skill development needs and monitor performance
<ul style="list-style-type: none"> Unreliable and limited IT / AV equipment <i>(Availability of reliable up-to-date technology and facilities)</i> 	<ul style="list-style-type: none"> Upgraded IT Resource Room equipment New Resource Rooms Consistent support for students in other University IT Resource Rooms
<ul style="list-style-type: none"> Inadequate Academic liaison and communication <i>(Pro-active partnership between academic staff and library)</i> 	<ul style="list-style-type: none"> Restructuring Information Team to provide support for University strategic priorities Increasing emphasis on sharing good practice across all Schools (e.g. information literacy training, research support) Increasing emphasis on support for e-Learning
<ul style="list-style-type: none"> Inadequate opening hours <i>(Opening hours which meet user needs)</i> 	<ul style="list-style-type: none"> Extended Summer opening hours Reviewing evening and weekend opening hours as part of the Help Desk Review
<ul style="list-style-type: none"> Lack of training and support when I need it <i>(Timely targeted training)</i> 	<ul style="list-style-type: none"> Inclusion of library information in 'Getting Started', a 6-week online induction programme for new students More emphasis on information skills training for all students and staff Review of Help Desk services initiated

Conclusions

Why do we have a library? Because we have customers who need one! Customer Value Research is used to improve the service to customers. In an academic library context, it is important to know and understand what the real needs of students and staff are. Using this methodology, planning is constantly informed by perceptions of current practices and also by the future aspirations and trends of the market.

Often, having undertaken the customer discovery research, it is easy to say, “I could have guessed that” or “I always thought that was so.” Rarely are there real surprises in the value factors. However, the confirmation of what is really valuable and to know the customers’ perceptions of our services is a mighty management tool. The regular monitoring of performance against expectations and hierarchy of values enables close alignment of resources and services. Library staff can see how their services provide value and participate in the decision-making about how to deliver on the customer value propositions.

Everyone benefits. Students and academic staff have services and resources that help them achieve their learning and teaching goals; the library can demonstrate its value to University and Faculty Executives; library staff benefit from the praise that follows making the customers happy. It becomes a self-perpetuating cycle of continuous improvement.

Abstract

The needs (or value factors) of academic library customers, principally academic staff and students, are the same regardless of what country in the world they come from. Examples from two university libraries, in Australia and the United Kingdom, are used to demonstrate that, using the same methodology, there is very little variation in what customers value about academic library services. The main variations that do occur are in the irritant factors, the local aspects of the library service that annoy or frustrate customers, but even with these, there are common themes. A description of the methodology for Customer Value Research is provided and the benefits of using this methodology are explained.

Management and marketing in the Library and Documentation Centre of Artium Basque Centre-Museum of Contemporary Art

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1. Introduction

Devising a marketing programme in Artium's Library and Documentation Centre involves analysing library resources and services, drafting a strategic marketing plan and establishing an evaluation programme to enable us to assess the extent to which our goals have been achieved.

The marketing plan has been included within the overall planning process of the library.

2. Identification of goals and objectives

Artium's Library has accepted the challenge of becoming a contemporary art documentary reference centre.

We should point out that marketing objectives are dependent upon the objectives and strategies of the institution. The main objective revolves round the concept of customer satisfaction. Based on this objective, a series of resources and services that aim to maximise the satisfaction of users are designed and offered.

The success of the library is sustainable if it is organised in such a way as to satisfy the current and future requirements of users with maximum efficiency. We try to offer users guidance in all aspects of the library's services.

Special emphasis is placed on user satisfaction as a specific marketing function, while remembering at all times that we must also do everything to ensure that he or she continues using our services.

Through analysis, planning, organisation, execution and control, we seek to determine the needs of our users and to estimate the potential of the library and of the market in order to be able to offer services of the maximum quality.

3. Analysis of resources and services

Firstly, an evaluation model has been established to ensure the total quality of the services offered by the library. The aim of the methodology used to assess the quality of the services offered is to obtain objective information of a quantitative and qualitative nature and in a systematic manner, as a basis for the decisions to be taken in this Centre in the future.

The evaluation process analyses all the factors and dimensions that have an effect on the quality of library services. In this sense, an analysis is made of resources, processes and results. Likewise, all its strong and weak points are determined.

The situation diagnosis is the consequence of a previous analysis that will allow us to identify the opportunities and threats existing in our environment.

The diagnosis allows us to identify and define the points that make up our strategy. We have used SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) in order to establish the diagnosis.

The SWOT analysis helps us to identify our strategic objectives; to identify the weaknesses of our Centre; identify the threats in our environment in order to prevent and/or correct these; identify our strengths and take advantage of them; and then discover new opportunities that will allow us to achieve our objectives.

Our intention is to detect competitive advantages and disadvantages that allow us to define our marketing strategy. These advantages must be related to the perceived value of users about our Centre.

We must satisfy the needs of users through the development of quality products and services. We must detect the relevant success factors and analyse our capability to develop these factors.

3. a) Internal analysis

The library must have a profound knowledge of what it is and wishes to be, its objectives, its resources and its weaknesses, its opportunities and threats, etc.

The internal diagnostic process is an overall, systematic and regular examination of the activities, resources and results of our Centre. This analysis allows us to highlight our strengths and the areas where we can improve.

Within this diagnosis, it is necessary to consider those elements that exist within our organisation that effect the competitive position of our Library:

- Analysis of human resources: Capabilities, skills and the satisfaction of the people who work in our Centre.

- Analysis of internal performance indicators: Processes and services.
- Analysis of financial resources.

This internal analysis helps us to detect the weaknesses and potentials of the Library. The internal assessment begins by collecting and systemising the information in our Centre. This information consists of statistics, management data and process indicators.

It is necessary to analyse the feasibility of the actions and strategies to be undertaken and examine the risk factors.

We must analyse the library services and their integration within the framework of the institution. We must examine the existence and operation of formal mechanisms of relationships between the managers of the Museum and the Library.

It is also necessary to assess the actions performed by the Library to inform Museum staff about the services and programmes it is developing. An analysis must be made of the pertinence of the documentary requirements of the Museum, and normalise the flow of communication established between all members of the institution.

This assessment should not be limited to a simple diagnosis of the situation, but contain proposals for solutions.

3. b) Analysis of the environment

Through an analysis of the situation outside our Centre, we aim to discover the opportunities and threats in our immediate environment. This institution needs to be familiar with its environment and use this information to adopt strategic decisions.

It is necessary to contact and establish alliances with other contemporary art libraries and documentation centres in this country and abroad. Special emphasis has been given to an analysis of the environment of neighbouring organisations in order to be able to identify and become familiar with their products and services and to determine those features that make us different, in an attempt to create new services and to take on new functions.

The library must bear in mind the needs and expectations of stakeholders. It is necessary to collect and analyse pertinent information as this allows us to define the market and the market segment in which our Centre operates. We must understand and anticipate the needs and expectations of interest groups as well as to determine and share the technological advances that are being developed in the world of documentation and information management.

4. Analysis of users

Knowing what our customers are like is the starting point for taking any decision. We need to be familiar with the characteristics of our customers and their expectations with regard to our Centre.

We must identify which user segments we can differentiate. This identification involves recognising the different user groups and adapting our services to their needs. The aim of this analysis is to offer a better service and, especially, to enable us to provide it in a more efficient manner. In this process, it is essential to analyse the needs of non-users in order to try to attract them to the Centre.

In this sense, we can establish different segments of the public:

- The Museum's own staff. These users need the Library and Documentation Department as an active instrument in their daily work.

They need information about artists and their works before purchasing them; they need information as a support for preparing exhibitions, and once the exhibitions have been set up, they need documentary support to help them explain the works to visitors to the Museum; they need information about art criticism and the latest artistic trends referred to in specialised periodicals; and they need information about the exhibitions and activities of other museums.

- History of Art students. Normally they ask for introductory works, encyclopaedias, dictionaries, reference works and artists' catalogues.
- Fine Arts students. They request information mainly about exhibition catalogues, monographs on design, films, sound art, video art, reference works and audiovisual material.
- Guides that take part in visits to the Museum. They need very specific and thorough information about the artists included in the Museum's exhibitions.
- University teachers. Normally they inquire about the periodicals we receive and the latest catalogues that have been published.
- Local artists and artists that collaborate with the Museum in the exhibitions it puts on. Mainly, they ask for gallery dossiers, information about the latest trends in electronic art, information about the activities of foreign museums, as well as articles about art criticism and the latest exhibitions being held on the international art scene.
- Gallery owners. Normally, they ask for specific information about young artists who are exhibiting their work and about the new techniques being developed.
- Researchers. They ask for all kinds of documentary sources about the subject in which they are doing research.
- The general public. They are interested in films, photography, architecture,

sound art and catalogues of exhibitions being held in the Museum or elsewhere in Spain.

It is essential to check on the appropriateness of the contents offered by libraries for the information requirements of each user segment. Likewise, new programmes and services must be promoted in accordance with the latent needs detected.

Once the contents and documentary services have been developed, adequate dissemination channels must be established for communication with users.

For the dissemination of documentary sources, a continuous information flow with users must be established, in other words, feedback that allows the contents and services to be updated periodically in accordance with the demands of researchers and users.

It is necessary to analyse user satisfaction and, based on this, determine the most appropriate strategy to ensure that he/she continues using the library's services.

This analytical process forms part of the process of continuous improvement in our organisation and has allowed us to define the following aspects:

- The strengths that we have identified in our management, that can be maintained and taken full advantage of.
- Strengths that still require further development.
- The areas identified for improvement, which are essential for our objectives.

5. Marketing strategies

Once user segments and needs have been identified and the available information resources have been defined, a marketing strategy is developed.

It is necessary to provide the project with a strategic dimension. Strategic marketing is a process, which, by means of analysis, planning, organisation, execution and control, seeks to determine the needs of users and to estimate the potential of the library and its environment.

By means of this strategy we try to adapt our internal factors to external factors in order to gain a better competitive position.

Marketing objectives are dependent upon the objectives and strategies of the institution:

- Consolidation of the library in society.
- Application of an efficient policy to attract users, keep them satisfied at all times and respond rapidly to any sign of dissatisfaction.

Once the objectives have been established, we must take a series of decisions about the actions to be taken and on the resources to be used.

6. Actions:

- Extension and modification of products and services.
- Improvement in the quality or characteristics of our services.
- Rationalisation of products and services.
- Development of specific communication campaigns.
- Selection of communication means and definition of the messages it is wished to convey.
- Motivation of Museum staff in the use of the Documentation Centre.
- Personalised contact with users.

A strategy must take the form of specific proposals if it is to be effective. It is necessary to establish a schedule that marks the rhythm of the activities to be developed, as well as to assign the required resources, estimate the expected costs and organise the amount of time and resources to be dedicated to these activities, in order of importance.

These actions are the measures required in order to secure our short-term and medium-term objectives to allow us to reach the goals set by this Centre. Likewise, an analysis is made of the feasibility of each one of the actions, of the foreseeable obstacles that might hinder their realisation and of the most appropriate strategies to be undertaken in each case.

The marketing programme also includes a process of benchmarking, which consists of a comparison of the products and services offered by the library with those available on the market. This will allow us to develop the appropriate programmes in accordance with specific user groups.

Specific programmes:

Digital contents

The main objective is to identify, locate, create, organise and provide access to complete documents in any format: electronic and digital texts, videos, music and any multimedia material.

The digital contents of the library may be extremely varied, both with regard to the type of materials it contains and to the diversity of the elements that make it up.

The type of material contained in the library includes:

- Digitised physical material: a part of the printed material is being converted to digital. The library is digitising part of its documentary collection to integrate graphics and text information. The documentary supports being digitised are as follows:
 - Brochures published by Artium.
 - Analysis of press coverage of the Museum.
 - Cataloguing periodicals.

- Digitising posters.
- Digitising comics.
- The library's own production of digital material: the library is placing special emphasis on the preparation of complementary digital documentation that will contribute to a greater understanding and comprehension of contemporary art.
- Acquisition of documents in digital format.
- Access to external digital materials.

Documentary Dossiers

Information dossiers are being prepared in order to document the different programmes of activities developed by the library and to enable it to offer information and documentary support for the exhibitions organised by the Museum.

Different kinds of dossiers are produced. On the one hand, we have artists' dossiers and on the other, dossiers on films, videos, exhibitions, etc.

These digital dossiers allow a high degree of interaction with the user, as they enable him or her to choose what works he or she wants and when he or she wants these.

Likewise, these dossiers offer the possibility of a non-sequential reading of the document. Digital information is designed in order to facilitate different ways of browsing the contents or gaining access to these.

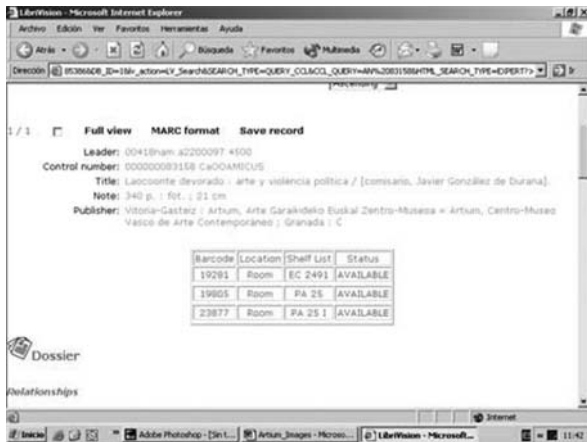
Online Public Access Catalogue



When we access the library catalogue, we find three different sections:
Bibliographical catalogue

In the catalogue, special emphasis is being placed on the notes that complement the information in the bibliographical register, in the relationships established between the different registers that make up the catalogue and in the links between the register and the electronic documents that complement this. The catalogue is a combination of documents on traditional supports and on electronic support.

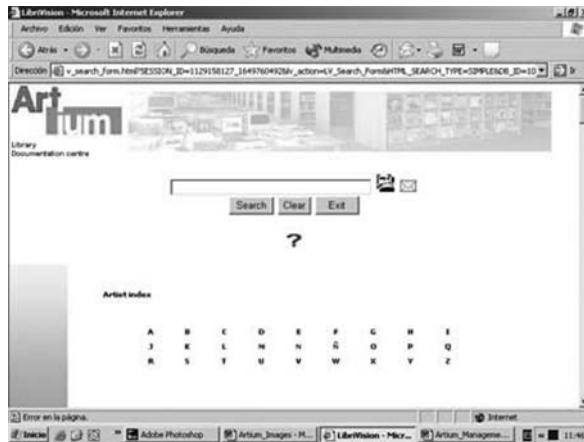
In order to be able to integrate all the information generated and facilitate the flow of communication with users, the digital dossiers produced by the Library have been linked with the library management programme.



Artist archive

Electronic documents on contemporary artists that are in the process of being documented.

This database includes electronic documentation drawn up on a number of different contemporary artists. As a first step, users can consult a short biography on each one of the artists. If required, the complete dossier on the artist can then be consulted.



Journal contents tables

In this database, users can consult digitised contents tables of the most representative journals of the Centre. Once the contents tables have been digitised, an OCR programme is applied to these, enabling searches to be made of free text against indices.



Virtual services

In the library, we try to articulate around the documentary contents a set of services that offer added value. The intention is to promote the creation of virtual documentary services:

- Inter-library loans: The aim of the inter-library loan service is to exchange and obtain documents between different libraries and documentation centres.
- Desiderata: this service allows users to recommend the acquisition of bibliographical collections (books, magazines, videos, DVD, CD-ROM, etc.) relating to the subjects covered by the Documentation Centre.
- New acquisitions bulletin: monthly bulletin that presents bibliographical references of works acquired by the Centre.
- Selective dissemination of information (SDI): service designed for professionals and researchers of contemporary art. With this service the library intends to anticipate the information needs of users. To do this, the information processed by the Documentation Centre on a series of previously-established theme areas, to which users can subscribe, is sent periodically by e-mail.
- Internet resources: the intention of this contemporary art portal is to provide access to information on artistic resources. The aims we have established focus on offering an interactive means of communication for all users interested in the development of cultural, technical and training activities at a national and international level. The intention of this resource is to make the library a reference site for information on art and cultural issues.



Monthly activities programme

- **Discover other collections.** Programming of audio pieces and works of art in CD-audio, CD-ROM and video together with the documentation associated with these collections.
- **About the cinema.** Collection of documentation relating to the cinema over the ages and any of its facets, accompanied by an individual viewing of the corresponding film. With this activity, the intention is to foster cinematographic documentation, by integrating different artistic disciplines and documentary supports.
- **Documentation about...** Bibliographic documentation and exhibition on different issues relating to contemporary art.
- **Getting to know contemporary dance.**

Culturally-related activities

- **Seminars for Contemporary Arts Documentation Centres**
The library organises biennial meetings with the intention of setting up a forum in which the role of documentation centres can be analysed with regard to new information dissemination strategies and also to take advantage of communication technologies in order to favour cooperation programmes between these centres.
The main aim of this seminar is to foster the development of museum libraries, providing incentives for co-operation between different institutions and in this way exploit the full potential of the centres.
- **Artium research grant on the documentary heritage of contemporary art**
Taking into consideration the aims of the Library and Documentation Department of Artium with regard to the support and promotion of research work and the dissemination of the study of contemporary artistic production, this research grant is organised on a biennial basis. Through this grant, the Library intends to reach young researchers and to encourage them to participate in our project.
- **EditArte**
EditArte is a programme designed to circulate the different publication procedures and formulas in the world of art (magazines, catalogues, books on artists, electronic proposals, etc.) between the public and general, students, artists and the specialised public.
EditArte has taken the form of small independent but interrelated modules that form an integral part of the activities of the Documentation Centre.
- **Workshops**
The library organises a number of workshops to analyse a range of different

aspects of artistic creation. These workshops are open to artists, cultural agents, designers and individuals interested in research and putting into practice the different projects as these emerge.

- **Letters for art**

The aim of the “Letters for art” programme is to link art and literature by offering a new way of approaching and discovering art. Through the eyes of a series of writers, this programme intends to offer an individualised study of the most significant works of the Museum’s collection.

- **Comics library**

Artium’s Library and Documentation Centre considers comics to be a visual medium which facilitates the collection of information and an instrument to promote culture. For these reasons and due to its relevance in the formation of a new artistic discipline, it has been decided to establish a comics library which will be used as a basis for future cultural activities and as a meeting place for a new kind of user.

6. Actions for communication.

The main objective is to obtain a greater level of involvement of users with the Centre. The aim is to gain a position in society as a model centre for research into and dissemination of contemporary art.

The existence of this library as well as its offer of resources and services must be made known. It is necessary to achieve a fluid, direct and continuous communication with users, offering them information about our programmes and activities.

Likewise, it is necessary to highlight the importance the opinions of users have for our Centre and for this reason we try to broaden the communication channels between users and the library as much as possible. From all the Library’s web sites there is a link to the Centre’s e-mail address so that users can send us their suggestions. There is even a notebook placed on the Library’s counter in which users can express their opinions. The survey allows us to determine the opinion of users about specific aspects of interest to us.

Based on these premises, we have developed a number of different actions:

- ***Corporate image***

Firstly, we have tried to build our own unique identity and we intend to convey this to society.

This corporate image embraces the project towards which the Library and the corporate culture of our Centre is oriented.

The aim is for users to discover what we have to offer and what they can

find in our Centre. The image we convey must be coherent with our trajectory, capable of responding to the expectations created.

- ***Promotional campaigns***

Planning of promotional campaigns aimed at different user segments.

In order to promote and provide information on our products and services, the following methods are used:

- Publication of information brochures about the Library.

Information brochures have been published about the Library, specifying for whom it is intended, its objectives, the composition of the documentary collection and sections of the Library opening hours and contact information.

- Publication of specific brochures to promote the different activities organised by the Library.

- Information banderole placed at the main entrance to the Museum.

- Bookmarkers.

Bookmarkers have been published with information about the Library and have been distributed among cultural institutions and given to visitors to the Museum and users of the Library.

- Guided visits.

Guided visits to the Library, designed for anyone who wishes to know more about our collections, sections and services, have been organised.

The intention of these visits is to provide users with a clear idea about what we offer in our Centre and the way to access to our services.

- Book Day.

On the occasion of Book Day, the Museum's Library takes part with a stand containing displays of the latest documents received by the Centre, as well as a small representation of the most recent issues of specialised contemporary art magazines.

Direct contact with users.

- ***Establishing alliances.***

Relationships with academic and cultural institutions. The Library has taken part in a number of different conferences and workgroups to provide information on its products and information services.

- ***Mass media.***

The intention is to convey a clear and powerful message as the help of the media is considered to be essential. It is essential for the media to be transmitters and witnesses to the different programmes and activities developed by our Centre.

Apart from periodic news items about our Centre and its activities, a number

of articles presenting our Library have been published in specialised art and documentation magazines.

7. Assessment of the marketing process

The systematic evaluation of the programmes that have been defined represents an essential element in the management of the Library. In accordance with the overall approach that we wish to give to the evaluation process, this does not begin when the activities end but before these are planned and while they are being carried out.

During the evaluation stage, an attempt is made to define the programmes about to be analysed, and information is gathered through observation, statistical measurements, questionnaires and interviews prepared for this purpose. The information gathered concerning the level of user satisfaction will be utilised to draw up new strategies and begin a new marketing cycle.

The systematic evaluation of the programmes that have been defined represents an essential element in the management of Artium's Library and Documentation Department.

The aim of the assessment process is to determine the strengths and weaknesses of its activities in order to be able to act in consequence. It must be borne in mind that in order to determine whether we are reaching our objectives or not, we must establish a number of criteria to allow us to compare the real results obtained with our expectations. The ultimate aim of the assessment is to allow us to take decisions about how we must act.

In Artium's Library and Documentation Department, the evaluation process is approached from a holistic viewpoint: each and every one of the elements that have an influence on the development of the programmed activities and concerning which coordinated actions must be taken, are observed. With this measure our intention is to increase the likelihood of the Library reaching the objectives it has established.

Within the assessment process, we have established the following:

Ex-ante assessment (a priori): the aim here is to provide rational criteria on which to take decisions leading to the establishment of objectives in accordance with the results we expect to attain.

Concurrent assessment: in this case the intention is to determine whether actions already in operation will continue or not in accordance with the extent to which they help us attain our objectives during their implementation.

Ex-post assessment (a posteriori): in this case the aim is to define the level of merit with which the established objectives have been attained.

Once the activity has concluded, we determine the extent to which the specific objectives, established in the planning of the activity, have been reached, as well as

whether this activity has contributed to helping the organisation achieve the specified objectives.

With this assessment, the Centre ensures, firstly, user satisfaction and the maximum performance of its resources. The Centre is able to rationalise costs as changes of activity can be introduced when badly conceived work is being performed and, likewise, we can use this assessment to justify investments according to quality and value, to users and interest groups.

The Department has prepared a number of forms for users to fill in when they are taking part in the activities and in this way determine their level of satisfaction. The ultimate objective is to improve the services we offer on a continuous basis and to programme subsequent activities in accordance with the requirements of users. Some other questions on the form must be filled in by the staff of the Centre, while the rest are intended for users who take part in the activities.

Our aim is to continue increasing the added value of our services by including new programmes and innovating and improving existing ones, placing special emphasis on the need to reach a larger number of users.

8. Conclusions

Being responsible for the management of the Museum's collections, as well as other activities relating to research and the dissemination of contemporary culture, ARTIUM's Library and Documentation Department represents a key element in the pursuit of its objectives.

The aim of the marketing programme is to create an awareness among users and the Museum itself of the value of the Documentation Centre. A feature of our Centre is the constant improvement in the quality of the services we offer, allowing us to reach an ever-larger number of users.

In order to draw up in marketing plan it is necessary to determine the needs of real and potential users, dividing these into different segments according to types or groups of specific needs, adjust the organisation to the needs detected, provide users with information about the services and products offered and to assess their level of satisfaction in order to make the final adjustments to these programmes.

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Abstracts

Devising a marketing programme in the Library and Documentation Centre of Artium involves a number of different tasks such as analysing library resources and services, drafting strategic marketing plans and establishing an evaluation programme to enable us to assess the extent to which our goals have been achieved.

Firstly, an evaluation model has been established to ensure the total quality of the services offered by the library. The aim of the methodology used to assess the quality of the services offered is to obtain objective information of a quantitative and qualitative nature and in a systematic manner, as a basis for the decisions to be taken in this Centre in the future.

The marketing programme also includes a comparison of the products and services offered by the library with those available on the market. This will allow us to develop the appropriate programmes in accordance with specific user groups.

The systematic evaluation of programmes represents an essential element in the management of the library. In accordance with the comprehensive approach that we wish to give the evaluation process, this does not begin when the activities end but before these are planned and while they are being carried out.

Resumen

La planificación de un programa de marketing en la Biblioteca y Centro de Documentación de Artium implica un análisis de los recursos y servicios bibliotecarios, el establecimiento de un plan estratégico de marketing y la fijación de un programa de evaluación que nos ayude a analizar los logros alcanzados en relación con los objetivos marcados.

En primer lugar se ha establecido un modelo de evaluación que asegure la calidad total de los servicios de la biblioteca. La metodología de evaluación de

los servicios ofertados pretende obtener información objetiva de carácter cuantitativo y cualitativo de manera sistemática, a fin de fundamentar las decisiones futuras que se tomen en el centro.

El programa de marketing se completa comparando los productos y servicios ofrecidos por la biblioteca con los disponibles en el mercado, lo que nos permitirá desarrollar los programas necesarios, en función de los grupos específicos de usuarios.

La evaluación sistemática de los programas definidos constituye un instrumento esencial de la gestión de la biblioteca. De acuerdo con el enfoque integral que queremos imprimir a la evaluación, el proceso no se inicia cuando finalizan las actividades, sino desde antes de ser planificadas, y mientras se están llevando a cabo.

Marketing to Diverse Populations

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Introduction

Lexington, Kentucky, U.S.A. is a southern community of 250,000 with a consolidated city/county government. Known as the “Horse Capital of the World”, its economy is centered around the sale of horses, horse farms, the world famous Keeneland Race Course and horse related industries. The gently rolling hills and bluegrass fields punctuated by white wood and dry stone horse fences compliment the picturesque landscape.



Figure 1: Location of Lexington, KY within the United States.

Lexington is an old city by American standards, having its origins in 1775. A group of land-seekers, hunters, surveyors, and speculators exploring Kentucky gathered and talked about creating a frontier settlement. They called this settlement Lexington. In the late 1780's the Lexington Library Company was formed. This was the beginning of what is known today as the Lexington Public Library. This library was the first public library in America west of the Allegheny Mountains.

The library plays a vital role in Lexington's present with a collection that exceeds 750,000 items and an annual circulation over 2 million. A Central Library and five branches serve the growing population. Lexington Public Library is a place for children to discover the joy of reading through story times and the Summer Reading Program. The Library is home to a unique resource, the Kentucky Room, with local materials dating to 1787. It also has unique services like Book Buddies, community volunteers who deliver library materials to the homebound.

The Lexington Public Library system is composed of a central library and five branch libraries. The five story Central Library is located in the heart of downtown Lexington on Main Street. The five Branches, which vary in size, are located geographically throughout the suburban/urban area surrounding the central city. All of the Libraries are heavily used as community spaces, for reference and information seeking activities, for children's programs, art exhibits, author events, casual reading spaces, computer use and computer classes, homework help and for

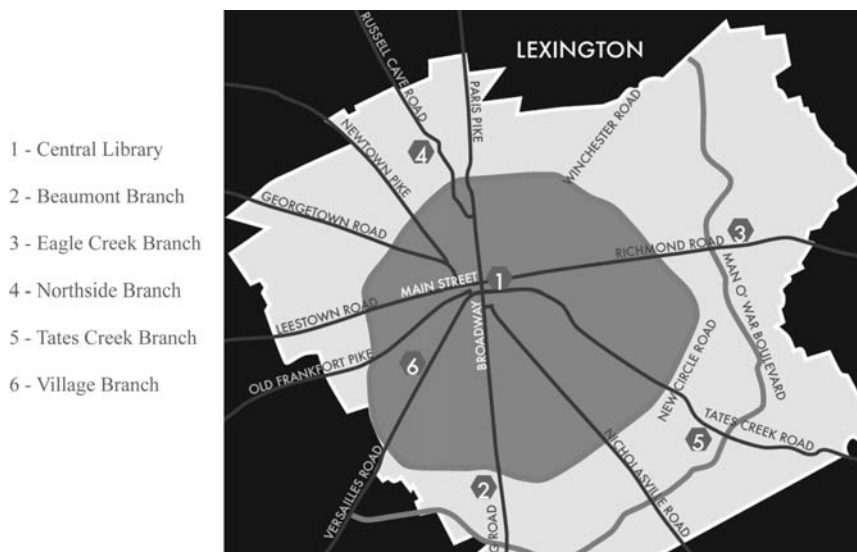


Figure 2: Map of Lexington Public Library locations.

materials check out. The Library seeks to meet the informational needs of all of the people in the county.

Background on the Village Branch

This paper focuses on the development and marketing of the Village Branch of the Lexington Public Library. The area served by the Branch Library is bordered on all four sides by major roads. It is located about three miles from the center of the city. The population in the Village Branch neighborhood is diverse with 40% Hispanic, 25% African American and 35% Caucasian. This varies from the total Lexington population which is 81.4% Caucasian, 14% African American and 4.2% Hispanic.

Few specialized or bi-lingual services had been available in the city for the fast growing Hispanic population. Many of the low paying jobs on the horse farms have been filled by people from Mexico. Most of the people who were immigrating from Mexico were not literate in Spanish and only had a third grade education. Bibliotheca Hispana, a small, one-room library with mainly donated books had been set up by a volunteer association to serve Spanish speaking people. It was open a few hours a week with volunteer staff and funded completely by donations.

In 2004 a local bank committed to a donation of \$10,000 to upgrade the service. The Lexington Public Library, which had no branch library service in this area, and Bibliotheca Hispania began talking about forming a partnership to provide library service to the Village Branch area which would highlight Hispanic services. A partnership was formed which led to the opening in September of 2004 of a new branch of the Lexington Public Library. The project was a fast tracked project, completed in seven months.

In order to move quickly to meet the need for information, recreational reading and language instruction services in the area, a 7,000sf leased space was rented and



Figure 3: Photo of Village Branch in shopping center.

renovated. It was a former auto shop with black walls, a black and white checkered tile floor, and a bay to change oil in cars.

The space is located in a very active strip shopping center on a bus route between a discount grocery store, a pawn shop and a beauty parlor. Many families are within walking distance which is unusual for an American branch library service area. The elementary school is less than a half mile away.

Renovation of the space began almost immediately and provided many challenges since the space was not purpose built. The large, store front glass window provided good visibility for neighborhood people to watch as the project progressed. Signs were posted in the windows which announced the coming of the branch library. People were very curious since most of them were not familiar with the concept of a free public library. The carpenters and other workers received many questions about what would fill the space.



Figure 4: Beginning construction of Village Branch.



Figure 5: Village Branch prior to construction.

Marketing Techniques

There were many marketing techniques that were used in this project to help insure and increase its success. During the planning process the library building group met regularly with a small focus group from the Hispanic community to get feedback at every step of the way.

Since most people from Mexico are not familiar with the concept of a public library that can be used by all and is free, it was particularly important to make the Village Branch a very inviting place. Also, the additional complicating factor for American public services when dealing with people from Mexico is their strong distrust of any government organization. It was critical to make the library not look like a government facility.



Figure 6: Bright colors of Village Branch.



Figure 7: Geometric furniture.

Strong colors, bold red, lime green, and royal blue on the walls, doors and shelves contrast sharply with the checkerboard black and white tile floor. The counter tops for the information desk and the check out desk are bright lime green. The lime green colour is continued on the far wall. Red table tops contrast with the blue chairs. Midnight blue and amber pendulum light globes outline the children's space. The meeting room wall is punctuated by random height cut outs of brightly colored plexi-glass. Shiny, bold red pillars tie the ceiling to the black and white gleaming floor.

The colours selected for the furniture are bold too. Geometric shaped children's stools feature lime green, bright blue and orange. The end panels with stars and moons cut into the wood are bright blue. All of the table tops are pomagranite red. The sliding doors are also vivid red.

High impact graphics are another feature of the building. The wall mounted computer terminals have canopies of bright blue with yellow stars to identify them as a place to find a computer. Carrying out the same theme, the low dividers at the information desk and the check out desk continue the same colours and star and galaxy theme of the fabric partitions.

One of the most difficult obstacles was the cement block wall that, due to cost constraints, could not to be removed. Note from the pictures that this obstacle was overcome by placing the staff office, the public computer room and the small meeting rooms in this area. Adding sliding doors to cover the multiple openings in the cement wall made the space functional.

Another challenge of the renovated space was to make the cement block walls attractive. Again, the budget did not allow for installing dry wall so a different solution had to be found. Specially designed fabric panels were made to match the desk



Figure 8: Low dividers.



Figure 9: Creative utilization of cement walls.

panels and computer canopies. The panels are each five feet by eight feet, cover almost the entire cement wall and are the most noticeable feature when you enter the building. The mural continues into the meeting room. Since the space is a rental space, if the library were to move, the graphic fabric panels, which are hung as easily as large pictures, can be removed and taken to a different location. The wall opposite the fabric paneled wall is painted high impact lime green.

All of signage throughout the building is in both English and Spanish. The library card applications and welcome brochures are in both languages also. The Hispanic focus group recommended not having the large Lexington Public Library outdoor sign in two languages. They were concerned that if it was in Spanish, English speakers would not think that the library was for them. The library has a self-check out station. The directional words on the screen are available in both Spanish and



Figure 10: Fabric Panel. Star and Galaxy theme.



Figure 11: Programming for all people.

English. The public access catalog has ten language selections available on it, including Spanish.

The Village Branch staff is all bi-lingual in English and Spanish. Two thirds of the staff were born outside of America and come from Cuba, Peru and Columbia. The Calendar of Events that the library publishes, lists all of the programs that go on in the six libraries, and has the Village Branch section in both English and Spanish.

The library uses the whole family approach for the programs held at the branch. Most of the programs that are planned encourage participation from the entire family. Children are welcome at the adult programs while parents, grandparents and care givers are welcome at the children's programs.

The four "A's" of building design were integrated into the Marketing Plan for the Village Branch. The first of the "A's" is adaptability. Many of the shelves are on wheels for easy moving. When a program is planned that anticipates a crowd that is too big for the meeting room (over 75), the front shelves are moved into the meeting room and the front area is used for the program. Sometimes the shelves are pushed against the wall so that there can be two programs going on – one in the meeting room and one in the front open area.

Another reason that the building is very adaptable is the sliding doors that help several areas function in two different ways. The public computer area with the doors open operates as a computer area for adults and teens. When the doors are slid shut, the space operates as a computer classroom. When the small meetings rooms need to be open, the doors are open. When there is a need for a more private space, the doors are closed.

The big meeting room is very adaptable too. It can be set up with chairs for 75 people in a lecture style. It can be set up with tables and chairs for about 50 people, and it can be set up without tables or chairs for about 100 people. It also can be set up for exhibits. The large meeting room contains an overhead LCD projector, a wall mounted screen, and a movable podium. The double glass doors that lead into the meeting room let people see what is happening even if the doors are closed. They can both be opened to make the meeting room area and the contiguous area connected. The entire space of the library is flexible, the furniture easy to move and the areas are multiuse.

The second "A" of good building design is Accessibility. The high impact entrance has a remote controlled handicapped accessible front double door. The entire building is on the same level and the bathrooms are accessible. The library shelving is all low and the bottom shelves are not used. Much of the shelving is face out shelving for convenient selection.

The library functions as a gathering place for the neighboring area including many school related events. Since the library is located within a half-mile of the



Figure 12: Large meeting room.



Figure 13: High impact entrance.

elementary school and there is no community center in the area, the library is the center for many well attended programs and community events. The open hours are convenient. The library is open Monday through Thursday, Saturday and Sunday and only is closed on Friday.

The third "A" of building design integrated into the marketing plan is Aesthetics. The goal of the entire building design was to create a warm, inviting space where everyone would feel welcome and comfortable. Non-traditional furniture helped to create spaces where people could sit low on a stool, cuddle with their child on a sofa, hang-out with teens at a high ice-cream style table with tall stools or relax in a comfy seat to read a magazine. Part of the marketing plan was to create a positive perception of the library which would then translate into a positive image.

The fourth "A" of excellent building design is Accommodation. The building is designed as a safe and secure place for both children, teens, adults and senior adults. It is a place of coming together for all of the people in the Village Branch community. It is a place for enjoyment and celebration.



Figure 14: Warm, inviting space, low seating.



Figure 15: A gathering place.

The Branch statistics reinforce after only seven months, the Village Branch Library is a very well used community space. Since September 2004 when the branch opened, the circulation has risen from a little over 2,000 items circulated per month to about 8,500 per month. These statistics do not account for the large number of items that are used in the Branch, but only include the items that are checked out for home use. Throughout the seven month period, materials checked out increased from 9 to 35 per hour.

The reference transactions rose significantly over the same seven month period. The number of reference questions asked went from 1,500 per month to over 4,000

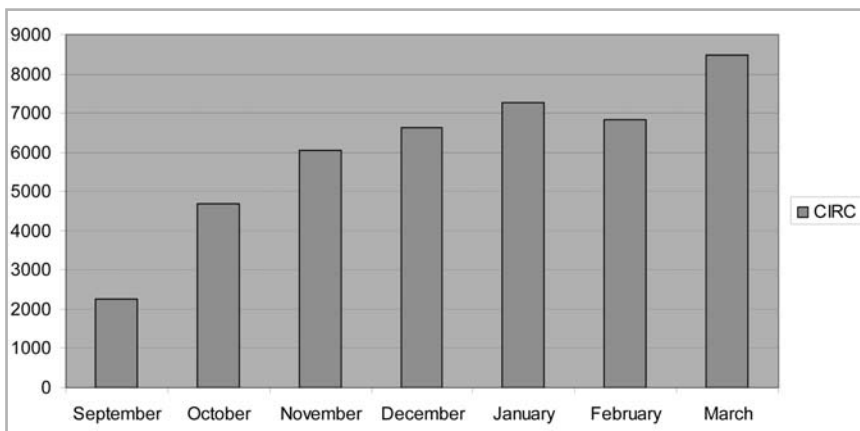


Figure 16: Village Branch Circulation Statistics.

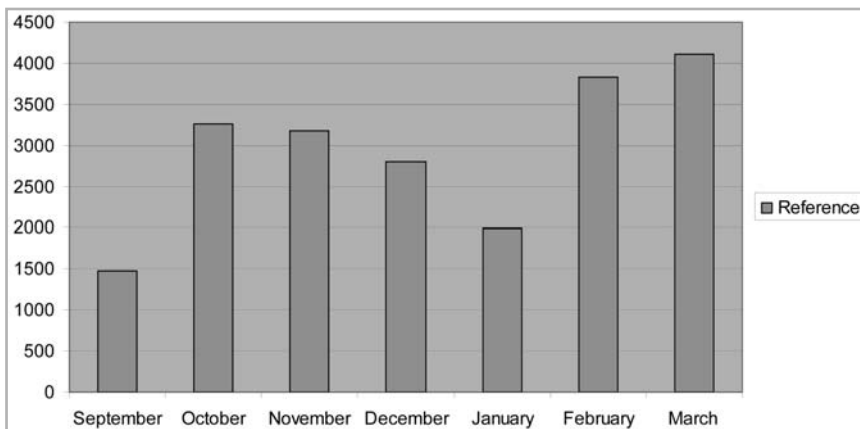


Figure 17: Village Branch Reference Statistics.

per month. This does not include directional questions. The reference transactions increased from 6 to 17 per hour.

Other measures of the success of the branch include attendance exceeding over 200 for family programs, the program and small meeting room space being totally booked, two and a half additional staff members had to be added after only five months to be able to keep up with the increased demands for service and the twenty-four computers are in use at all times with waiting lines, and the materials budget had to be increased mid-year. The Village Branch of the Lexington Public Library is a marketing success.

Abstract

This paper outlines the marketing techniques developed and used by the Lexington Public Library, Kentucky U.S.A. to establish highly successful library service to a diverse population.



Figure 18: A marketing success.

Getting help and doing research: what do patrons want? An exploratory study comparing desk users with virtual reference users.

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Introduction

Ryerson and York Universities in Toronto, Canada, have been involved in a real-time chat reference collaboration since 2001. Catering to a student body of over 55,000, we have witnessed the service grow in popularity to the extent that by 2003 we modified our staffing model and increased hours. A successful pilot phase segued into a relatively stable service. In spite of the clear popularity of virtual reference at our universities, questions regarding its cost effectiveness do not go away: the length of time to answer questions, staffing model challenges and the inconsistent performance of software, to name a few.

Chat services materialized in earnest in the late 1990's from essentially these pressures and influences:

- Digital content and technologies
- Declining reference desk usage
- Computer labs on campus
- *The Net Generation* and non-traditional learners (cite)
- More Distance Education and online (distributed) course delivery
- Reference desk aversion and library anxiety
- Learning styles debates, English as a Second Language (ESL), disabilities
- Adoption of call-centre software
- 5 years ago: less broadband

Like most academic libraries we had experienced declines in usage at our reference desks since the early 1990s. Due to the massive changes of the past decade, much of it because of the emergence of digital technologies and content, the decision to take on a chat virtual reference service (VR), from our vantage, was a logical, appropriate and progressive response. (For the purposes of this study, VR (and for brevity, the acronym) encompasses a synchronous, real time reference encounter where library staff chat live with library patrons over the internet. Email reference services will be referred to as *email services* and are defined as reference assistance through asynchronous means.)

The initial enthusiasm of VR adoption and experimentation has given way more recently to decidedly tempered support due to persistent technological challenges and questions regarding cost effectiveness. At the same time, the community has matured to grapple with issues concerning the development of service standards and performance measures, as well as calls to adopt a comprehensive research agenda (see for example, R. David Lankes, et al, [The Virtual Reference Experience: Integrating Theory into Practice](#)). One particularly noteworthy sentiment that struck a chord was voiced by Steve Coffman, one of the early and influential proponents of chat reference services, when he questioned the ongoing relevance of synchronous web-based services in an article written in late 2004 (see bibliography). A rebuttal article was published by Bailey-Hainer (see bibliography). An important debate has clearly emerged regarding the efficacy of VR, versus telephone, email and hybrid services.

Our study represents a preliminary and exploratory consideration of the help-seeking preferences of a growing student body that prefers to be off-site using digital resources, away from the library, and/or just not willing or able to reach a reference desk. Specifically, we were interested to know in what proportions different modes of reference services are used by our patrons (email, chat, phone, desk and other), what users prefer to do to get help whether on or off campus, and their preference for location when doing research. We were also interested in exploring differences, if any, between face-to-face reference desk users and users of our VR service.

Literature Review

Turning to the literature to find insights into user preferences for different types of reference services proved challenging and to some extent inspired us to delve into this research in earnest. Up until the late 1990's reference services involved mainly telephone and reference desk services and for a growing number of libraries, email reference. Interestingly, the literature mostly lacks research focusing on comparative analyses, even of telephone services. Library users have ever increasing amounts

of digital content at their finger tips and many studies show they *prefer* this format over print. That we know (see particularly the excellent review article, by Carol Tenopir listed in bibliography). On the other hand, help seeking preference studies or studies that compare different reference services reside in somewhat uncharted territory.

Methodology

Survey

This study consisted of two similar surveys, one in-person and one online, carried out during the fall of 2004. The surveys were distributed to library users at two universities in Toronto, Canada: Ryerson University with a full time student population of 18,000 and York University with a student body of 38,000.

A pop-up survey was provided to all VR (chat) users over a two week period in November of 2004; and a similar survey issued to reference desk users over the same time period. The survey was distributed until an acceptable amount had been filled out: approximately 100 for each university's reference desks; and approximately 100 from VR users (the final frequencies for each survey were, reference desk, 242 and VR, 106). Admittedly these sample targets were arbitrary; however, it was some assurance that smaller groups (like graduate students) would be adequately represented. The survey asked seven core questions exploring use and preference for reference services and habits and preferences for study location (in library, off campus, etc.), resources and chat software use. The survey distributed to VR users included additional questions on the chat process, expectations and VR software preferences. The appendix contains both surveys.

Since this is an exploratory study, a purposive, non-probability sampling method was employed. Given the focus was on patron use of various reference services, a random sampling of the entire student body was considered too time consuming and of dubious use at this stage. Furthermore, the data analysis plan was to be able to compare and contrast VR and Desk users (rather than doing a random sample of university students or even library users) in terms of their characteristics, preferences and behaviour. While this type of sampling does not allow for statistical significance testing (for e.g. Chi square), the survey instrument and the sample size provide some latitude for descriptive analysis as well as providing the opportunity to suggest direction and options for future study.

Focus Groups

Four focus groups were conducted both in person and online as an adjunct to our survey results and to assist us with defining directions for future study. Our intention was to include the results as a formal part of the research, however, the

sample size for the focus groups proved too small: seven for the in-person focus groups and four for the online focus groups. One of the most interesting learning outcomes of this aspect of the study was how difficult focus group research can be, especially the time consuming and often disappointing results of gathering subjects. Each focus group was given seven questions relating to help seeking preferences, problems encountered when getting help, expectations of the chat reference service and suggestions for improvement to the chat service. The results will be noted as anecdotal evidence only.

Results

In total, 348 library users completed surveys. Of these 106 were completed by virtual reference users (30%), and 242 (70%) were completed by reference desk users. The proportion by institution differed between the two types of surveys. Because York University’s virtual reference service is busier than Ryerson’s the majority of the VR surveys were completed by York users. 75% were York users, 22% were Ryerson users and the remaining 3% were VR users who used one of the two services but were unaffiliated with either institution. The proportion was more even for the surveys completed at a reference desk; 53% of these were York surveys and 47% were Ryerson surveys.

Table 1: Patron Status - Desk users vs. VR users

	Desk Survey		VR Survey	
Undergrads	209	86.4%	79	74.5%
Graduate	8	3.3%	17	16%
Cont. Ed.	15	6.2%	3	2.8%
Faculty	2	0.8%	3	2.8%
Staff	3	1.2%	2	1.9%
Other	1	0.4%	2	1.9%
N/A	4	1.7%	0	-
Total	242	100%	106	99.9%

In both surveys, undergraduates are overwhelmingly represented, yet the VR survey has a more diverse population of users in all categories, except for Continuing Education, and graduate students are a clearly larger group in VR than at the desk: 16% of the VR respondents were graduate students, compared to a mere 3.3%

of the reference desk respondents. The Continuing Education category, is a category of users at Ryerson who are all undergraduates taking part time programs.

Table 2: If you are in one of the libraries, how would you prefer to get research help? (on a scale of 1-5, where 1=least preferred, 5=most preferred)

	Desk Survey	VR Survey
Reference Desk	4.4	4.3
Telephone Reference	2.0	1.8
Chat Reference	2.2	3.5
Email Reference	2.2	2.1
Library web site	3.8	3.8
Google/search engine	3.6	2.9
Other	2.0	1.8

Table 3: If you are off campus, how would you prefer to get research help? (on a scale of 1-5, where 1=least preferred, 5=most preferred)

	Survey	VR Survey
Telephone Reference	2.6	2.8
Chat Reference	2.6	4.3
Email Reference	2.9	2.9
Library web site	4.3	3.8
Google/search engine	3.9	3.2
Other	2.4	1.9

Tables 2 and 3 represent responses to two separate questions: preference for help depending if you are in library or off campus, respectively. Among the options we included consulting the library web site for information, and searching Google or an internet search engine. We included these options because we felt that our users may increasingly seek answers to what would be reference questions by employing self-help strategies and consulting sources on the internet (whether they be sites we have constructed ourselves or popular external sites).

The reference desk is rated highest by respondents from both groups. This was confirmed by our focus group participants who see the reference desk as the “premier” service offered by their libraries and the majority see the “face to face” personal encounter with a staff member as desirable. Desk users and VR users alike have moderate to low interest in telephone and email in terms of staffed services and both see the library’s web site and Google as options for research support. However, for desk survey respondents, choosing the library’s web site and Google for off campus assistance could be indicative of a lack of awareness of off-site options for help, since clear differences emerge for the two survey groups in terms of preference for chat reference. VR users show a preference for chat reference when either on or off campus, a preference comparable to their preference for the desk. All but one of the focus group subjects, all of whom were VR users, preferred chat reference when off campus. The one hold out, preferred the phone.

The meager showing of email and telephone, particularly telephone reference, is a somewhat worrisome result. Most libraries have policies that position telephone reference as a lower priority to in-person reference (and this was noted strongly in the Steve Coffman article criticizing Chat reference services, noted above). Unlike chat and email reference services, the telephone, for the most part, continues to be a service offered by staff at the reference desk. This fact is clearly problematic both in policy and in practice. Focus group respondents had either not used the phone service or tended to speak poorly of it; though two participants had positive experiences. It is difficult to generalize the problems with a low preference for email – the results could reflect a lack of awareness. Focus group participants generally confirmed this; and a general perception is that it is not “fast” enough – even though turn-around time for both universities is 24 hours, or better.

It can be concluded from these results that exposure to VR creates a positive perception and indeed a preference for chat reference services when off campus that is comparable to the reference desk. It is important to stress that the survey data tells us that exposure to VR creates some degree of preference for use when in the library. The majority of focus group participants noted that, in addition to using VR from home, they had used or considered using VR while in the library. A majority of the focus group participants were turned off by line-ups at the desk and preferred VR use in the library for this reason. Two participants noted the staff “were intimidating” so preferred chat reference over a face to face encounter, regardless of being on or off campus.

**Table 4: In the past 12 months how often have you visited one of the libraries?
Desk user vs. VR users**

	Desk survey	VR survey
Never	-	3.3%
A few times	21.5%	14.6%
About once a month	8.7%	17.9%
Once a week	18.2%	22%
Several time a week	49.6%	38.2%
No response	2.1%	4.1%
Total	100.1%	100.1%

Those respondents who filled out the desk survey were more likely to be frequent (several times a week/once a week) visitors to the library than respondents from the VR survey: 68% for the desk respondents and 60% for VR.

Table 5: Where do Undergrads and Grads like to do their research?

	Undergraduates	Graduates
Library	46.5%	23.5%
On campus, not in library	4.4%	23.5%
Off campus	36%	41.2%
No Preference	13.1%	11.8%
(Total (real numbers))	383	34)

Table 6: Preference for Getting Help Off Campus – Undergraduates vs. Graduates (on a scale of 1-5, where 1=least preferred, 5=most preferred)

	Undergraduates	Graduates
VR	2.6	3.4
Email	2.8	3
Phone	2.6	2.9
Library Web site	4.3	4
Google	3.8	3.1

It is important to note that graduate students, in real numbers, represent only 34 respondents, making drawing conclusions somewhat problematic. That said, the data reflects what we do know about graduate students in terms of study habits and privileges: they have more options in and around campus to study and have longer loan periods, making library visits less necessary on a regular basis. Graduate students help preferences reflects a clearer awareness of staff-based options and perhaps it could be said more sophistication and/or exposure in the use of library resources and services. For graduate students, unlike undergraduates, VR figures as a significant choice along with the library web site.

Conclusions and Future Considerations

The premise for the study was based on the assumption that a reasonable exposure to newer reference services, such as chat and email, had occurred, therefore, an examination of emerging preferences for different types of services would yield helpful information for strategic planning regarding resources, services and most importantly, the future and efficacy of virtual reference.

A literature review reveals that there are no other studies that have looked at preferences so explicitly. The closest study was conducted by Johnson (2004) who conducted a survey to investigate “university affiliates’ awareness of, use of, and interest in reference services, with a particular focus on online chat reference (synchronous digital reference).” The survey instrument asked directly “their first option” if seeking assistance from library staff in a hypothetical scenario and relationships were drawn between preferences noted and status of respondent.

Methodologically, the Johnson study, was able to do significance tests due to the random sampling of the university population. It was found that undergraduates were most likely to choose face-to-face reference services and faculty were more likely to choose email and phone reference. In terms of chat, there were disappointing results in that few people had used the service and few people were even aware of it. Of those people that used chat, one said they would use it again. This particular campus had a mere one year’s experience with chat reference (Ryerson and York universities had been offering chat for close to three years at the time of our study) and it is not surprising that marketing and promotion formed an important part of their conclusions. A number of other studies that shed some light, indirectly, on user preference and choice making are listed in the bibliography, but due to time constraints will not be covered in the presentation.

It can be said that the reference desk continues to be the most popular method of getting help in the library, but our findings confirm that virtual reference satisfies a niche for some users, quite likely those who prefer to work outside the library. That said, chat reference was noted as a preference comparable to the desk for VR users,

when in the library. Although many users have yet to try our virtual reference services, those who use virtual reference tend to perceive their options for getting help differently from other users. Far from being a marginal service or unknown, virtual reference is seen as a significant service option for those who use it.

In addition, our results show that virtual reference services seem to have a special appeal to graduate students since graduate students are more likely to conduct their research outside the library. Johnson's study showed similar results for both faculty and grad students in terms of use of email and phone services. Our sample size for faculty was too small to draw any conclusions at this time. Johnson's data also showed there to be slightly more interest for chat services among grad students than the other populations sampled. Again, it needs to be stressed that the chat service at Johnson's university was only one year old.

Though the methodology employed in our study makes drawing general conclusions problematic, as an exploratory study it points to a number of useful and interesting areas for further study. Some of those are listed here for consideration and discussion:

- 1) Conduct a study where surveys are provided to email and telephone users. It may be that, like chat users, exposure to a service and regular use of a specific service is a predictor of preference for that service.
- 2) It was problematic to include "web site" and "google" as reference options. We cannot be sure how survey respondents interpreted these options as "reference services."
- 3) So that significance testing can be performed, survey randomly the university population of grads, undergrads, faculty, staff; or randomly sample library users.
- 4) Consider other angles to the population like distance education, learning disabilities, part-time vs. full time, to name a few.
- 5) Ask about awareness of services and about openness to newer services. These would indicate some kind of understanding of the different services offered.
- 6) Focus group participants indicated a desire for "online communities" to assist in doing library research. This should be explored.
- 7) Persist with a series of focus groups to get more feedback.
- 8) Explore sex and age differences with preference for reference service.
- 9) Library anxiety studies and preference for help.
- 10) Information Search Process (ISP) – like the work of Carol Kulthau – research should consider help seeking preferences in future.

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Abstract

Are virtual reference users reaching a new type of user? Are they addressing substantially different needs and preferences than traditional reference services? Should virtual reference be a key player in addressing new service pressures as a result of the growth in digital content and the shift to remote usage of library resources? These questions formed the impetus for a comparative study that was conducted to explore the preferences of our users for different modes of reference assistance as well as a number of other related variables like visits to the library, preferences for location when doing research, types of resources they consult and expectations of staff. A survey was administered to reference desk users, virtual reference users and visitors to our web sites. To further explore these issues a series of focus groups both in-person and online were conducted. This session will report on the findings of the study, the methodologies employed and problems encountered, and suggestions for further research.

Marketing library services. A case study at University of Illinois at Urbana – Champaign USA

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The University Library at the University of Illinois at Urbana – Champaign (UIUC) consists of over 40 departmental libraries with more than 10 million volumes, making it the largest public university library and the third largest among all university libraries in North America. As a departmental library within the University Library, the Business & Economics Library (BEL) primarily serves students and faculty at the College of Business for their research needs. Each year, approximately 3,500 students and faculty in its various programs, such as business administration, finance, and accounting, receive services from BEL.

Starting in 2002, BEL sought to reshape its image from a “house of books” to an electronic business information center. Until then, the main use of BEL by undergraduate business students had been to retrieve course-reserve materials, and graduate business students and faculty members generally used BEL to check out books for their research. As business information increasingly became available in electronic formats – easily retrievable via the Internet in most cases – BEL subsequently placed more emphasis on providing electronic resources than paper-based resources. This change reflected new pedagogical needs of business education as well.

Graduate business programs, especially the Master of Business Administration (MBA), seek to train business professionals, and the curriculum for those students are designed to train business decision-makers who can make difficult decisions based on the information given to them in a fast-paced environment. As a result,

they need quick access to quantitative databases with which they can quickly retrieve numeric data. On the contrary, their use of scholarly journals or other materials is minimal at best, compared to graduate students in other subject fields such as humanities and social sciences. Business students and faculty members need information resources which they can easily access and which are continuously being updated, and electronic information has thus become the perfect solution for them. Electronic information can easily be manipulated and then incorporated into their business presentations and project assignments, while data from paper-based resources often require laborious and time-consuming process to copy data into computer software programs for further analysis.

As the nature of library services changed, BEL strongly felt the need to change students' perceptions of the library from a "house of books" to an electronic information center. In other words, BEL needed to develop a branding strategy and to market itself to students and faculty members as a new kind of service provider. To accomplish this goal, BEL decided to follow basic marketing research techniques that would involve careful analysis of data. This paper presents a case study in which how BEL created marketing campaign strategies based on the data collected.

Customer Segmentations

The first step was to determine the target population. The three main segmentations of BEL's user group consist of students, faculty, and staff at the College of Business. These segments can also be broken further into several segments:

- Students
- Undergraduate students
- Graduate students
- International students
- Domestic students
- Faculty
- Fields of study (e.g. marketing, finance, accounting)
- Tenure status
- Staff
- Functions (e.g. admissions, career services, facilities)

It was clear that no single marketing strategy would work effectively for all segments. BEL needed to build different strategies for individual segments. BEL determined that the first target segment would be graduate business students, both domestic and international.

Data Collection

Understanding students' current perceptions and expectations of the library was critical to formulate marketing strategies. BEL conducted two surveys with questionnaire in 2003 and 2004. The questionnaire was designed to understand demographics, satisfaction with various library services, and the use of the Internet. The questionnaire was distributed to business students on various locations on campus, and a total of 271 valid responses were received. To measure students' satisfaction with and importance of various library services, the author used the Likert-scale (5 = very satisfied or very important, 4 = somewhat satisfied or somewhat important, 3 = neutral, 2 = somewhat dissatisfied or not too important, 1 = very dissatisfied or not important at all). The author mainly performed descriptive statistical analysis due to the insufficient number of the respondents for meaningful inferential statistical analysis; however, the author also performed t-tests and simple regression analysis as necessary.

Summary of findings

The author reported the survey results and analysis in detail (2003 & 2004). This section provides a summary of key findings from the survey results. First, library instruction proved to be an excellent tool to change students' perceptions of library services. The survey results showed that students in general were more motivated to use library services after they received library instruction, and especially international students indicated that library instruction helped them learn library services which they would not know otherwise. Secondly, it was interesting that space for personal study was the most important library service to most respondents, and students showed little interest in virtual reference services via e-mail and online chat, which the University Library was promoting heavily. Thirdly, the length of stay at the College of Business did not correlate with the frequency of library use. In other words, simply spending more years at the College of Business did not lead to the increased use of library services. Fourthly, graduate business students generally did not have a clear understanding of subject librarians' roles, and they did not have confidence in subject librarians' knowledge in the field of business. Lastly, international students had much less experience with electronic business information resources in their home countries than did domestic students.

The rapid adoption of the Internet undoubtedly affected the nature of library services in many ways. The survey results showed that approximately 80 percent of graduate business students had broadband access to the Internet, and thus telecommunications infrastructure was not a barrier to using electronic business information on the Internet. Surprisingly, over 80 percent of international students

indicated that they had broadband access to the Internet in their home countries, but about an equal percentage of them had not used electronic business information via the Internet for research or assignments. The results suggested that advanced Internet connection did not automatically lead to the use of electronic information provided by their home university libraries. In addition, such information seeking behavior was very likely to continue, even after they started studying in the U.S.

About a half of the respondents spent the most time on a number of career-related Internet sites, and it was potentially the most significant piece of information in developing marketing strategies. Business schools at graduate level sought to train business practitioners, not business academicians, and their quality of education was ultimately measured by the employment rate of their students and starting salaries. Similarly, graduate business students' main motivation for going to business schools was to find jobs with high salaries after graduation.

Implications for developing marketing strategies

The survey results provided important insights into graduate business students' information seeking behaviors. Based on some key findings, BEL developed appropriate strategies. The following describes those key findings and BEL's action plans.

1) Career was the main driving factor for graduate business students when searching for information on the Internet. As mentioned previously, business students' primary concern was their employment after graduation. They spent most of their time searching for career-related information on the Internet, and they actively participated in campus programs and activities that provided information on companies and industries in which they were interested. This finding suggested that BEL could effectively increase its visibility to business students by offering career-related information services.

Collaboration between libraries and career services is not unusual. The library literature provides substantial amount of cases where libraries maintain close relationship with career services. Hollister (2005), for example, describes how he was able to cultivate continuous relationship between the Undergraduate Library and the University's Career Service Office at the University at Buffalo. He successfully built a strong partnership with the Career Services Office by integrating information literacy instruction into the offerings of the Career Services Office. Furthermore, library instruction has been strongly advocated as a tool to build liaison relationship not only with faculty but also with non-academic units (Glynn & Wu, 2003; O'Sullivan, 2002; Feast, 2003; DeHart, 1996).

2) Most graduate business students had broadband access to the Internet. Internet infrastructure was not a barrier to students; in fact, BEL was once concerned that there might have existed a digital divided among students in terms of

broadband access to the Internet. BEL now had to emphasize the fact that electronic information could be accessed from anywhere at any time, regardless of location and time, as long as students had reliable Internet access. Especially since many international students had little previous experience with electronic information provided by libraries in their home countries, BEL had to make extra efforts to promote the convenience of accessing electronic information resources using the Internet.

3) *Students did not initiate learning library services but library instruction greatly changed students' perceptions of library services.* However, the survey results showed that library instruction was a very effective marketing tool to introduce new library resources and services to students. Most students stated that they learned library services that they would not have known otherwise, and library instruction motivated them to explore library services further. Based on the survey results, BEL decided that library instruction would be the main marketing channel to communicate the value of BEL's services to students and build relationship with them.

4) *Library was still viewed as a physical place rather than a service point.* Students valued the space provided by BEL, but they did not know other services such as reference, instruction, and individual research consultation. Such a perception might be due to their lack of understanding in the role of librarians and lack of confidence in librarians' subject knowledge in business-related fields. Library instruction sessions were excellent opportunities to help students to have confidence in librarians' knowledge in business and to help them realize that BEL was more than a physical space but a service point where they could receive valuable assistance for their research.

Formulate and implementing action items

The survey results convinced BEL that career-related activities would be most attractive to graduate business students. BEL contacted the Business Career Services Office (BCSO) to discuss providing collaborative programs to help students with their career search. BCSO's primary responsibility was to assist graduate business students in obtaining desirable jobs by hosting prospective employers to the campus, holding seminars on writing resumes and cover letters, and providing individual career counseling. Recognizing the fact that comprehensive research on companies and industries was the critical element in successful job search, BCSO requested BEL to provide a workshop on how to use electronic business information resources provided by BEL.

During the workshop, the author discussed the importance of careful company research in job search process, and introduced key electronic databases that provided valuable information on companies and industries in which students were most

interested. Prior to the workshop, the author contacted all the participants and asked if they had specific questions. The author then conducted extensive research to answer those questions at the workshop. The workshop led students to learn BEL's electronic information that was easily accessible, and, after the workshop, those students who did not participate in the workshop request additional workshops for them. As a result, nearly 40 students participated in the two workshops. The success of those workshops led to more requests from BCSO in the coming year. Most electronic information resources introduced during the workshops could be used for academic purposes such as class assignments, thesis, and projects. Hence, career research workshops became an excellent marketing venue to promote BEL's rich electronic information collection that could be used for a variety of pedagogical purposes.

Furthermore, BCSO incorporated BEL's career research workshop as a regular component in the new student orientation, and, as a result, BEL could start building relationship with students at the early stage of their programs. Since the length of stay at the College of Business had no correlation with the frequent use of library services, promoting library services early was very important. In addition, the successful collaboration with BCSO led to a new opportunity with other departments. The Finance Department requested BEL to host a library research workshop during its orientation for new students in the finance program and the technology management program within the Business Administration Department asked BEL to help target potential sponsors for its new program as BEL's electronic information resources were their primary tools for researching potential sponsors.

When providing library instruction in the forms of workshops, seminars, and classroom teaching, the author carefully designed the instruction so that any instruction would be a marketing opportunity to communicate BEL's services and increase its visibility. Library instruction was generally designed around the concept of information literacy, which was to help students to become competent in identifying and retrieving relevant information according to their purposes. In addition to information literacy, two other components were included in library instruction designed by BEL. As the survey results clearly showed, students initially had low expectations on librarians' expert knowledge in their subject areas, and the author sought to change this perception during instruction. The survey results suggested that such a lack of confidence in librarians' subject specialty was especially prevalent among international students. Changing the perception that they had carried over from their home countries proved to be a challenge, but instruction was an excellent opportunity at least to demonstrate that subject librarians' deep knowledge in business fields.

4 P's of marketing mix

Data collected from the survey were analyzed and resulted into the 4 P's of marketing mix. The 4 P's of marketing mix (product, price, promotion, and place) were the fundamental concept for marketing, which were widely used by marketing practitioners in developing marketing strategies. Based on the survey results, the author constructed a marketing strategy using the 4 P's of marketing (Table 1).

Product	The product that BEL is to market to graduate business students is a collection of electronic business information resources accessible via the Internet.
Place	Library instruction will be conducted at computer labs and classrooms where students can have hands-on experience.
Promotion	The primary promotion tool is library instruction in the forms of workshops, seminars, and guest lecture for specific courses.
Price	Students need access to the Internet (preferably broadband access). Research shows that most graduate business students have broadband access to the Internet already, and thus there is no extra cost.

Evaluation

Devising methods of evaluation is a critical factor in any project, but it is also one of the most difficult items in project management. The author used several methods to assess the success of BEL's ongoing marketing efforts. One key indicator was that 8 pt experienced a significant increase in individual consultation requests from graduate business students. Individual consultations usually took more than one hour in length, and appointments were usually required. In 2002, there was no individual consultation request, but in 2004, there were a total of 38 individual consultation requests, all of which were related to career research. During each consultation, a student shared personal career goal, interest, and some unique situation she/he faced in exploring job opportunities. The author, in turn, drafted research agenda and plans based on the student's needs, and provided suggestions in identifying and using relevant electronic information resources.

Also, BEL's career research workshops became a regular component of BCSO's year-long education program for graduate business students. BEL was asked to provide three career research workshops during the new student orientation, to participate in career seminars along with corporate recruiting managers, and to

help students in writing resumes and preparing for actual interviews. The number of attendees at BEL's career research workshops grew from 42 in 2002 to 126 in 2004. The role of BEL in helping students with career research expanded significantly as a result.

Conclusion

Reshaping user perceptions of BEL was a challenging initiative, especially because the traditional perception of BEL as a house of books had been shared among students and faculty members for a long period of time. To formulate effective marketing strategies, collecting data to understand current perceptions and expectations was necessary instead of simply depending on librarians' opinions and observations; subsequently, transforming survey findings into actual marketing plans through analysis greatly helped build BEL's new identity as an electronic business information center. Undoubtedly, new strategies will need to be developed when BEL targets different segments such as undergraduate business students, the faculty, and the staff. Regardless of the target segment, however, collecting and analyzing data through careful research design and implementation will serve as the foundation for developing marketing strategies.

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Abstract:

Due to changes in pedagogical requirements for business education and students' information seeking behaviors, the Business & Economics Library (BEL) at the University of Illinois at Urbana – Champaign sought to launch a marketing campaign to promote its new services. BEL conducted extensive survey to study students' experiences and expectations of library services, so that it could develop marketing strategies that would meet students' needs based on the survey results. This paper discusses how BEL constructed marketing strategies by applying statistical analysis, and preliminary results of the marketing campaign.

Background: The University Library at the University of Illinois at Urbana – Champaign (UIUC) consists of over 40 departmental libraries with more than 10 million volumes, making it the largest public university library and the third largest among all university libraries in North America. As a departmental library within the University Library, the Business & Economics Library (BEL) primarily serves students and faculty at the College of Business for their research needs. Each year, approximately 3,500 students and faculty in its various programs, such as business administration, finance, and accounting, receive services from the BEL.

Challenge: Starting 2002, the BEL sought to reshape its image from a “house of books” to an electronic business information center. The authors conducted extensive research to study user experiences and expectations of library services and developed marketing strategies to promote the BEL's services.

Solution: Overall, the key elements of the BEL's marketing strategies were collaboration with the Career Services Office in the form of co-branding and relationship management with faculty. Research activities also provided valuable insights into user experiences and expectations, which became the foundation of marketing strategies.

User Expectations and Experiences

In 2003 and 2004, the authors conducted two separate surveys to study business students' perception and use of library services. In so doing, the authors discovered different use patterns of library services between domestic and international students, as well as their current use of electronic library services. Segmenting domestic and international students was important since approximately more than a half of business students were from overseas. The responses to the questionnaire were analyzed using both descriptive and inferential statistics.

Marketing Strategies

The BEL then developed several marketing strategies using the 4P's of marketing mix. To increase its visibility and awareness, the BEL determined that collaboration with the Career Services Office was critical and proposed to hold joint programs. The BEL also developed instruction programs on business databases which students expressed their strong interest to learn. Most instruction sessions were held at computer laboratories to be hands-on classes, so that students could immediately see and learn the benefits of electronic resources. In addition, the BEL continuously cultivated and maintained close relationships with business faculty members who would then become strong advocates of the BEL, and in so doing, the BEL could establish strong presence as a pedagogical partner.

Evaluation

Various methods were used to assess the success of the BEL's ongoing marketing efforts. One key indicator was that the BEL experienced a significant increase in individual consultation requests from international students who had traditionally not been active users. The BEL's special instruction programs also received high ratings from participants. The Finance Department also embedded the BEL's library instruction sessions into the official orientation program for graduate finance students. Graduate students also rated the BEL's services highly according to the survey administered by the University Library.

The Library as a part of cultural behavior. Summary of a large scale survey to identify user trends and reading behavior in Flanders libraries

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Introduction

Flemish libraries and library legislation

Since it became mandatory in 1978 that every community, city or village have a public library the Flemish¹ region has what is known as a high “library density”. This means that there are 309 libraries with more than a 1000 service points covering every part of Flanders. In total the Flemish libraries employ about 2400 people, 1600 of which are full time. The majority of library employees are female including at the executive level.

Flemish libraries provide in general a wide range of information and cultural services. In every Flemish library you will find both fiction and non-fiction books, magazines, multi-media resources, databases as well as computer facilities. Two thirds of the libraries also have an audio CD and DVD/video collection.

Depending on the calculation mode between 28 to 35% of the population of Flanders are a member of a public library or visit the library. Most of the members of the library, 67%, are older than 15 years old.

Since the year 2000 the library legislation in Flanders has changed profoundly. Whereas prior to 2000 the legislation focused primarily on defining what a library is (what is a library, how many titles, surface of the library ...) the new library law shifted its attention to what a library should do (what is the place of a library in a society). The basis for governmental library subsidy became more qualitative instead of quantitative.

1) Although Belgium barely has a population of 10 000 000 people it is a federation consisting of Flanders (the Dutch part), Wallonia (the French part) and finally the Oostkantons (the German part). Cultural affairs, library legislation is insight the authority of the ‘federations’, therefore we’ll speak about Flanders here.

In order to achieve this major turn around communities, cities and villages received greater autonomy in dealing with their financial recourses. A business plan for every library became mandatory and a support/expertise centre –the Flemish Agency for Public Libraries (VCOB)- was founded.

The Flemish centre for public libraries

With more than 300 libraries in Flanders and Brussels it became obvious for the VCOB that the greatest opportunities for increasing library performance and efficiency were to be found in centralizing aspects of the back office. Moving processes like cataloguing and acquisition from a local to a supra-local level, created both extra time at the local level and greater expertise at the supra-local level. To make this vision concrete the VCOB was designed to facilitate project management and project organization. Eight project managers and five consultants supervise a variety of projects in the fields of digitalization and technology, library management, readers' development and marketing.

Two examples of projects that fall under the category digitalization are the building of a central catalogue and the design and exploitation of the library portal (www.bibliotheek.be), which is based on a real time network. Library management projects include business planning, human resources and performance measurement. One of the most important reader's development projects is an in depth ICT driven cooperation between formal education facilities and libraries. In addition nation wide campaigns have been set up targeting youngsters as well as parents/adults.

Marketing and market research

In the field of marketing a lot of interesting and useful work has already been developed and implemented by individual libraries. Unfortunately these efforts are not indicative of a broader view and vision regarding marketing. Despite some very good efforts, libraries in Flanders are not generally run as customer driven organizations. In fact, before 2004, there was no way of ascertaining who actually visited the library.

Besides the efforts made in local libraries there have been some large scale events in which all the Flemish libraries worked together in the field of marketing and promotion. These large scale events have been mainly focused around library week. Library week is a week in October when all libraries organize a variety of activities around a mutual theme.

Given this situation the VCOB focused it's marketing attention around three area's: supporting and improving the existing events on a national level, conducting market research and developing a marketing strategy based upon these studies which can be implemented by the public libraries.

This paper will focus primarily on the market research done in 2004. This involved a major investigation of the people who utilize the library.

User research

Basic assumptions:

Before 2004 there were basically no useful statistics on library users available. As a direct result of the fact that every library needed a business plan the demand for user data grew. To avoid every library starting its own survey independently the VCOB launched a project that responded to this need for data.

Because the VCOB is a support centre with no actual authority over the libraries we were limited in the ways to set up such a massive project. We calculated that there are roughly two ways to set up such a project. One might set up a training program that enables the interested librarians to perform a survey themselves. Another way would be that the VCOB sets up a survey and publishes the results so they can be used by the libraries.

The advantages of the former method were its was low cost and that the VCOB has experience in this approach since it had been successfully used for the process of business planning. The disadvantage lay in the fact that a great effort would be needed from the local librarians who would need training in market research and statistics. Given the educational background of a majority of the staff (human and social sciences) this was not evident.

Together with the University of Brussels the VCOB (Flemish center for public libraries) collected in 2004 an impressive mass of data among the library visitors.

Based on random samples in 165 libraries from more than 32 000 visitors we've got the answers on a large survey form as well as what those visitors borrowed during 6 months. As thus this became the largest survey ever performed in Belgium in the field of public libraries.

The collected data is now being used for marketing goals. Using a recent developed logarithm for clustering and starting from their cultural behavior and media preference, six different user groups have been detected among the library user. These types were called: fun seekers, the house sparrow; the cultural passer-by; the cultural fastidious, the omnivores and the cultural elite.

Secondly this approach would have led to a patchwork of data that would have been difficult to compare to each other.

The top down approach guaranteed unified and comparable data, but in order for it to be useful to the individual libraries we knew it was imperative that many people be questioned. At the very least enough people so that something useful could be said for every type and size of library. It became obvious that this data collection would become too expensive.

Therefore a project was designed that combined the best of two worlds. All operations that needed statistical expertise were done on a central level and all tasks involving collection of data, for instance, distribution of the survey forms and entering the answers were done at the local level. In this approach three basic assumptions were formulated:

1. Scientific correctness.

The method of data collection and the data processing had to be designed and preformed according scientific and mathematical standards.

2. National and local level.

By standardization of the survey and method the collected data should be useful for both the local library and at a national level.

3. Easy to perform

All tasks that needed to be done by the local libraries were clear and didn't assume a specific background from the library employees.

4. Data useful for marketing

The results of the survey needed to be used for marketing. Specifically for increasing existing and new market segments. This aspect will be described in the next chapter.

Research assumptions

Even in a non-profit environment the essence of marketing is that it should be used to increase 'turnover'. As a library our goal is to get new people to utilize our facilities or we want existing users to come to the library more often. A market study is in this respect useful when it reveals interesting market segments. To find interesting segments it behooves us to know why people are, or are not as the case may be, attracted to certain products or services. The question becomes thus: what are the underlying motives for people to visit a library.

Answers to this question were found in recent sociological research by the TOR group at the Free University of Brussels. Based upon studies in the use of time these researchers developed an interesting framework that became the backbone of the survey.

There is great consensus about the fact that post war European society including Flemish society was structured around age, income, gender and religion. These factors were predominant in people's life and choices. Consequently a whole network of schools, newspapers (media), unions, political movements, socio-cultural institutions, etc. were built based upon these factors. Not surprisingly Flemish libraries were also structured based upon these factors.

The TOR researchers subscribe to the common view that these patterns that structured the post war European/Flemish society have mostly ‘evaporated’. However they refuse to accept that there is no structure at all anymore. In their observations of how people spent their leisure time new and clearly defined patterns were found. Because of their appearance the new factors are called symbolic.

After analysis of all the activities that the examined people did in their free time it became obvious that there were two dominant dimensions in the activities. The first dimension can be called the cultural value of activities. Visiting opera and theater have for example a high cultural value. The other dimension focuses on the fun and action value. Examples of activities with high fun and action value would be visiting sports games and discos.

With these two dimensions a coordinate system with two axis can be drawn, creating as such four different groups or segments.

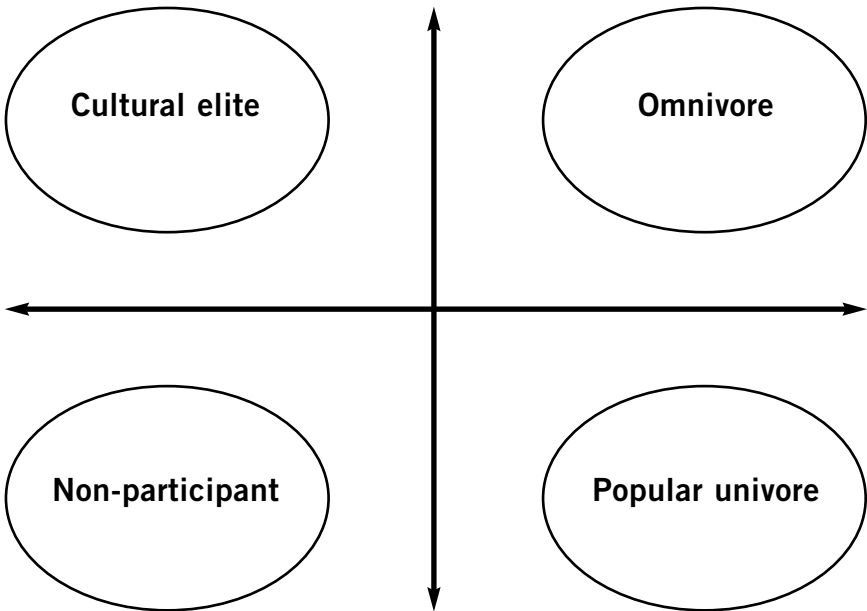


Fig. 1: Segmentation according to the symbolic society.

The segment in the upper left field is called “cultural univores”. People in this quadrant participate predominantly in activities with a high cultural value. These people are seen in the museums, opera and theater houses. In their choice of media

this group prefers quality newspapers and information and/or classical radio and TV stations.

At the lower right side the fun/action univore is found. This group exclusively participates in activities belonging to the “fun world”. They are seen at bars, discos, sports events and movie theaters. This group prefers popular newspapers and media.

People in the upper right side are called omnivores because of their tendency to do both type of activities. These people go to the theater and classical concerts, but they also like to go to bars, sports events as well as music events. However their media preference is more similar to that of the cultural univore than to that of the fun/action univore.

Finally in the lower left corner we have the non-participants. These people do not participate in any form of outside leisure at all. This generally, although not exclusively, older group is found at home in front of the television in their free time. Popular media is predominant in this quadrant.

Based upon an analysis of existing datasets it became clear that library visit was also determined by these factors. Library visitors were found unevenly in all four groups but there were strong indicators that the way of use varied accordingly.

Thus the challenge became to reveal which segments came more or less frequently to a library and above all who comes and for what purpose.

Project outline

Due to a unique partnership between the VCOB, the research unit TOR and the individual libraries a large set of data was gathered in a relatively short period of time and at a low cost for all the partners involved.

Libraries joined the project voluntarily and paid a small contribution. As already mentioned the libraries also performed most of the fieldwork.

After joining the project a random sample of the members of the library was taken. The library software was then prepared for the survey and the library staff was trained to do the fieldwork.

During six months all data was gathered and analyzed. The results were presented in individual reports and using an interactive website.

Random sample

In all the libraries that joined the project a random sample was taken. According to the size of the library these sample varied between 100 and 500 active adult members. An active member was somebody who did at least one transaction in the year preceding the survey.

The members of the library taking part in the sample were check marked in the library software so that their lending activities were stored and so that the

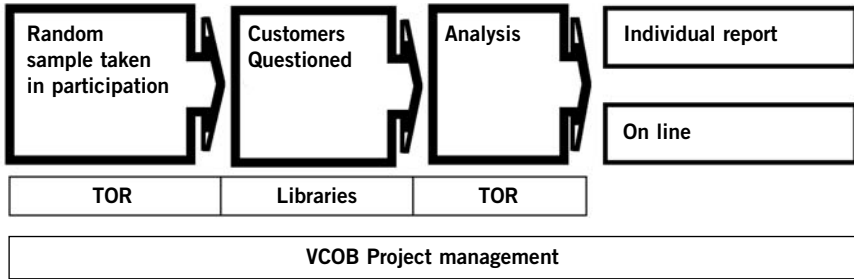


Fig. 2: Project outline of the data collection and analysis.

staff at the desk received a reminder to hand out a survey form.

In total 168 random samples were taken in 165 different libraries.

5. Data collection

This part of the project was done primarily by the individual library. Therefore the library staff received a brief training. During this stage of the project a helpdesk was available during office hours.

In total more than 300 people were trained in six days.

In order to get an answer to all the questions that lived at all different levels it was decided that three major datasets would be collected. Knowing a survey form, borrowed items and library features.

Survey form

In a large surveyform questions were asked about library use, the library experience, visitors backgrounds and specific variables.

Library use

In this subset questions were asked to reveal how people use the library.

For instance, what materials, how do find your materials, when do you come, with who, why, etc.

Library experience

In a number of questions peoples opinions were asked. This part naturally contained many questions about satisfaction, general and specific, but also opinions about the image of the library and its staff.

Background

Not only were people asked about “classic” variables such as age, gender, education,etc. but they were also asked how they spent their leisure time, what kind of media they preferred, as well as general opinions about reading and education.

Specific variables

Finally every local library was given the possibility to add specific questions to the survey form. The majority of these questions were about the use or satisfaction of a specific or new service.

In total 339 different variables per survey were questioned.

Borrowed items

During six months every transaction of the people taking part in the study that was stored. A transaction consisted of what item (book, cd, etc), the title, the author and the borrower's identification number. The identification number consisted of a set of numbers that made it possible to join this set of data to the answers of the survey form.

To obtain this data changes had to be made to the local library systems. Due to privacy laws this information is not automatically stored.

After six months all the libraries sent their data to a central point. It was clear that the local datasets needed data cleaning before it could be consolidated into one database. The union catalogue of the five largest libraries in Flanders was in this respect very useful.

The result is a dataset that can be analyzed in detail on the level of individual borrower, type of material and book genre, title and author both for fiction and non fiction.

Library features

Finally the libraries had to fill in a survey themselves. Questions were asked about the library. For instance, how big are the different collections, when is the library open, what are the tariffs, does the library do any particular actions, etc. This information was used for multi-level analysis and provided insight into the relations between the features of a library and the actual user. For example, is there a correlation between the satisfaction of full-time employees and the opening hours of a library?

The added value of all these datasets lay in the fact that they are interconnected and that an almost endless number of relations can be analyzed.

In total more than 32 000 people handed in their survey form and more than 500 000 borrowing activities were registered.

Overview of the first results

Because so much data was collected the analysis was done in different stages. First the results of the survey form were processed and presented. Afterwards an on-line service was created that allowed libraries to present and consult their individual scores.

Finally cluster analysis of the loan statistics will be made as well as the multi-level analysis.

Results of the survey form

6. An individual report for every library

After all the data of the survey forms was entered in a large database the data was analyzed and structured in way that would be useful for making individual reports. The purpose of these reports was to get an overview of the most important statistics.

The results were displayed in a way that individual results could be compared to the national average and to the averages of comparable libraries. Using the size of the different collections and the amount of staff five clusters of libraries were made.

7. Overview of the most remarkable results:

THE LIBRARY USER

The library user in Flanders is mainly female. This is even more obvious in smaller libraries than in the bigger libraries, where the proportion of men and women tends to be equal.

Compared to the Flemish demographics the age group 30 to 44 are overrepresented in the Flemish libraries. Elder people (+60) on the other hand are strongly underrepresented. The part of the age group of 18-26 increases together with the library size.

As seen in all studies on cultural participation, and thus also in our study on Flemish libraries, the visitors are higher educated than the national average. The larger the library the larger the group of higher educated members. Accordingly and not surprisingly given the ages of the people who most use the library, we also see that most of the visitors are employed. Compared to Flanders few retired people visit the library. Students are mostly found in the largest libraries. This is not unexpected considering the fact that most schools and universities are situated in cities which have large libraries.

The average library user is thus a higher educated woman between 30 and 44.

MEMBERSHIP OF THE LIBRARY

77,5 % of all members started their library membership in their childhood. The majority (64,4%) never interrupted their membership.

About one third of the users are a member of more than one library. The largest and the smallest libraries have the highest rates of multiple membership. Most of the people visit the library in their own village, but this number decreases drastically as the libraries become bigger.

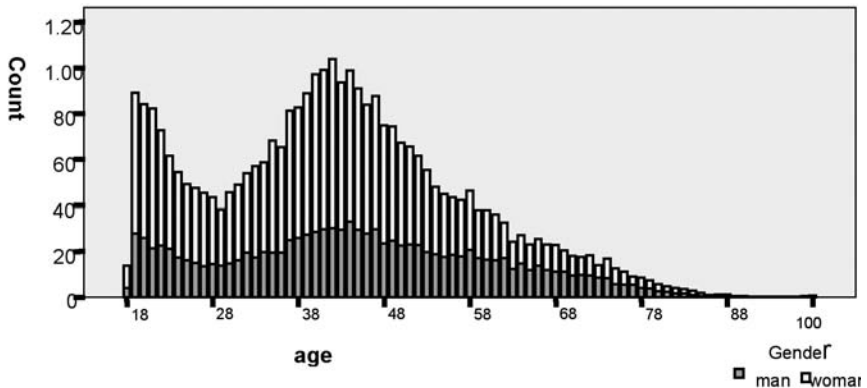


Fig 3: Age structure of the Flemish library user

REASON OF USE

The library is mostly used for recreational purposes (a good book or CD). Information is for almost half of the people a reason for visiting the library. About a third visit the library for the children. Computer and internet score surprisingly low.

LIBRARY VISIT

An overwhelming majority of the people, 86,6%, visit the library at least every month. The larger the library the bigger the groups of both very occasional as well as heavy users (more than once week) become. The monthly visitors are more predominant in smaller libraries.

A library visit takes in 82,7 of the cases no longer than a half an hour. The bigger the collections the longer a visit takes.

USE OF MATERIALS

Almost all users come to the library for books (98,1 %). About half (42,4 %) also use CD's. Comics, video/DVD, cd-rom and magazines are used by +/- 20%.

SEARCHING MATERIALS

Books are found by wondering between the shelves or by going immediately to the title of choice. A smaller but significant amount of, about one third, use the catalogue.

SATISFACTION

Visitors are very satisfied about the different library services. Only the availability of new books and the printer and copy services score a bit less. It is obvious that the bigger the library the less satisfied the people are. This is a strange twist since the availability of new works is actually higher in larger libraries.

73,7 of the visitors indicate that they are satisfied about the opening hours. When

asked when a library should additionally be open saturday afternoon and, to a lesser extent sunday morning, were the top answers.

8. In depth on-line analysis for libraries with large samples

For larger libraries it was possible to take a bigger sample (up to 500 respondents). In these libraries it is possible to perform more in depth analysis of the survey form since more variables can be investigated simultaneously. Therefore a web application was designed where libraries could explore there own data in an interactive way.

By entering an unique code the library get access to its individual data. By choosing different variables out of a drop menu the library can combine two variables. The cross tabulated variables can be shown in tables as well as ina a bar chart format. With this application it is possible to see if there is any dependency between variables. For examples it can be seen that especially younger people (variable age) are the least satisfied (variable satisfaction) with the library.

This application also provides the possibility to compare the individual results with the cluster averages, both in the numeric as in the graphic mode.

If the count for an individual cell is to low the application gives an indication. In this case one might conclude that the observed phenomena is rare, but the actual percentages should not be used in any further analysis.

MARKETING CONCLUSIONS

Based upon this data marketing conclusions can already be made.

A more thorough investigation of the data shows that the age variable follows a particular strange pattern. The age curve of the library visitors starts with a steep drop for the age group 18-30. At 30 years the curve starts to climb again to reach it's highest point at the age of 40. After this age the curve starts to decline although less dramaticly than the way it did between ages 18 and 30. Finaly at an age of 70 the decline seems to almost stop.

By examining the curve four age groups can be defined (18-30; 30-45; 45-60; 60+) which we will look at more closely.

9. I. Young and functional user

This group visits the library more than average for information which they need for study and/or work. The youngsters come to the library with a well defined plan and tend to utilize the catalogue to find their materials. Out of all the users they use the most variety of materials; books, audio, comics and the computer. Out of all the groups this group uses the computer the most.

A very important characteristic of this group is that they are the most unsatisfied of all the different groups. In fact if somebody is dissatisfied it will most

likely be someone from this group.

This is the functional, young and unsatisfied multi-user!

10. II. The young families

The group between 30 and 45 has the most females out of all the different groups. Actually the aforementioned image of the library user as a higher educated women in her thirties is the most applicable for this group. If asked why they are visiting the library one reason stands out, the children. Besides computers and internet, this group uses almost all materials in the library. Compared to the other groups, they use the most DVD's.

The 30-45'ers use the library as a shopper would do, on a saturday or during the week in the evenings, this group finds the materials by walking through the shelves without a specific plan. In fact when this group visits a library in another town than were they live, the reason is most often because they can combine it with shopping and/or the children's school. This group is mainly satisfied with the library.

An interesting aspect of this group is that we know that they were library members when they were young however the majority indicates that they interrupted their library use. This info leads us to believe that there is an opportunity to win back a part of the 18-30 year olds whose library use is, as we saw, in a steep decline.

11. III. The middle aged recreational user

From the age of 45 the curve starts to decline again. Under this part of the curve we find a group that uses the library in its most traditional way, they come to borrow books for recreational purposes. They find a books using no specific strategy, just by wandering through the library or by consulting the stands with new books. Consequently they enter the library with no specific plan.

Although declining, this group is highly satisfied with the library.

12. IV. The retired library excursist

Finally, the remaining group consisting of age 75 years old and up is a very specific group. They're the most frequent library users, the scores for weekly or daily visits are the highest in this group. Coming to the library seems to be a social event for the retired library excursist. In this group we find high numbers for activities like reading a paper, meeting people or even because they just like library. Consequently it is no surprise that they stay longer than average in the library.

If we look at the use of the computer facilities we see that they use them often or don't use the computer facilities at all. There is no inbetween.

This group is satisfied about the library and it's services in an almost suspicious way, some services are rated 'exceptional' by all the members of the group.

Starting from this analysis the VCOB is shifting its marketing attention to the two middle groups. Via promotion the re-entry of the 30-years old must be intensified and by loyalty and retention programs the drop out of the 45-years old must be tempered.

To do so, deeper insight is needed into the core of these two groups. Therefore the aforementioned framework as outlined by TOR is useful.

SYMBOLIC SEGMENTS

As it was mentioned in the project outline the aim was to use this data for marketing purposes. Therefore segmentation using the framework of the TOR researchers proved useful.

Analysis of the loan statistics is still in progress but a first clustering, based mainly on the survey, reveals indeed six different 'symbolic' groups, as seen in the table below.

The popular univore is a younger segment. They are more female and have in general a lower level of education (compared to the other library users).

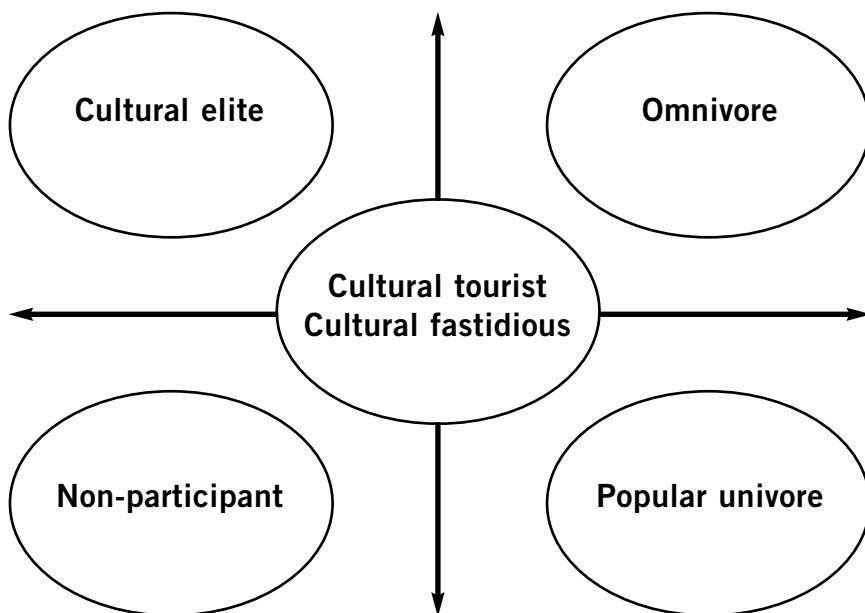


Fig 4: The symbolic segmentation of the library user.

	Cultural axis	Fun axis	Media	Demographics
Popular univore	Low	High	Popular	Level of education : low Age : mainly young Gender : Female
House sparrow	Low	Low	Popular	Level of education : lowest Age : active age group (30-60) Gender : more female
Cultural tourist	Medium	Medium	Popular	Level of education : high
Cultural fastidious			Quality	Age : just above the active age Gender : more even
Omnivore	High	High	Quality	Level of education : high Age : young Gender : even
Cultural elite	High	Low	Quality	Level of education : highest Age : Older Gender : even

Fig 5: Overview

In their leisure time they like activities that belongs to the “fun world” (bars, discos, sports events and movie theaters). On the other hand they don’t go to pure cultural activities. They prefer popular media.

The house sparrow is called so because this segment doesn’t participate much at outdoor leisure activities at all : they’re not seen at fun activities, nor at cultural activities. This middle aged, more female group has the lowest level of education and also prefers popular media.

The cultural tourist and the cultural fastidious are similar groups. They're both higher educated and a bit older than the former group. Gender wise they're more evenly divided. Both the cultural tourist and the cultural fastidious have an average score on the fun and cultural axis. The big difference between the two of them lies in their media preference : the tourist prefers popular media, the fastidious prefers quality media.

As we can expect he omnivore participate both on fun and cultural activities. In this younger and higher educated segment the proportion men and women are almost equal. They prefer quality media.

Finally the older and high educated cultural elite only goes to cultural leisure activities. They prefer quality media and also are gender wise evenly divided.

Conclusion

Due to a unique partnership between the support centre for Flemish Public libraries, 165 libraries and a university, a process of data collection and analysis was successfully completed.

The results of the survey showed that the Flemish library user is more educated and more female and between the 30 and 45 years old. The recreational function of the library seems to be the most important for users and they are very satisfied.

Based on the lifecycle four groups could be identified. Based upon this insight promotion attention should be drawn to the group between 30 and 45 since this is a group that tends to return to the library. Loyalty and retention programs should be designed for the group after 45.

Further investigation showed that based on cultural behavior and media preference, library users can be segmented into different interest groups.

The next step will be that this information should be translated in an operational marketing strategy. Further also the lending histories will be incorporated in the survey.

Abstract:

Together with the University of Brussels the VCOB (Flemish center for public libraries) collected in 2004 an impressive mass of data among the library visitors.

Based on random samples in 165 libraries from more than 32 000 visitors we've got the answers on a large survey form as well as what those visitors borrowed during 6 months. As thus this became the largest survey ever performed in Belgium in the field of public libraries.

The collected data is now being used for marketing goals. Using a recent developed logarithm for clustering and starting from their cultural behavior and media preference, six different user groups have been detected among the library user. These types were called: fun seekers, the house sparrow; the cultural passer-by; the cultural fastidious, the omnivores and the cultural elite.

Evaluating library services – best practice initiatives in Australian university libraries

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Introduction

Collection and use of data in the planning and management of library activities, and the measurement of performance of these activities has a long history. In recent years, with the automation of library functions and the shift to a networked information environment, the potential sources and types of data that can be collected have increased, at an almost exponential rate. This has resulted in the need for libraries to refocus on data collection, question their current activities, and rationalise efforts to ensure that the range of data being collected is relevant, sustainable and meets specific objectives. In other words the reasons for collection are clearly understood by all, and can be justified in terms of their role in the monitoring and improvement of library performance. Hiller and Self (2004) provide a useful historical summary, tracing the evolution of data collection and its application in improving library performance. The authors contend that a key catalyst in the evolution of collecting data for improvement was the introduction of strategic planning in libraries during the 1980s. This resulted in the implementation of planning and improvement frameworks, which identified overall library objectives, action plans to meet those objectives, their implementation, the monitoring and evaluation of results through measurement activities, and the consequent introduction of new actions to improve performance.

This evolution of data collection for measurement purposes has now reached a stage where performance measures are being grouped into three main categories –

inputs, outputs and, increasingly, outcomes (or impacts). Examples of inputs are size of collections, size of budgets and staffing profiles; examples of outputs include use of collections, number of reference questions answered and number of information literacy classes held. Outcomes, on the other hand, are more complex and have been broadly defined as “what impact the library has on the life of its clientele” (Hiller and Self, 2004, p.140) and “the ways in which library users are changed as a result of their contact with the library’s resources and programs” (ACRL, 2000). This shift in the measurement focus is being particularly driven in the United States, with the many accreditation agencies now moving to outcomes based assessment. However, as Cullen (2002) observes, “outcomes have proved to be a more difficult area of evaluation, and there is no work to date on standards for outcomes”. Hiller and Self (2004, p.2) in discussing recent deliberations of the ARL Committee on Statistics and Measurement, note the ARL comments that “it is only through using a wide variety of measures that one can hope to get a full and accurate reading of the library’s activities”. The ARL New Measures Initiative was established to explore data collection measures that would “go beyond traditional input/output measures, to capture the use and impact of libraries”. Eight areas of interest have been identified by the ARL initiative – user satisfaction, market penetration, ease and breadth of access, library impact on teaching and learning, library impact on research, cost effectiveness of library operations and services, library facilities and space and organisational capacity (ARL, 1999).

Hernon and Dugan (2003) further note the need to recognize that the measures utilised will differ according to the perspective of who wants to know. They contend there are four perspectives which need to be considered –

1. library centred - the library’s perceived service priorities and its success in meeting these priorities as defined by input, output and performance measures
2. institution centred – the output and performance measures used to demonstrate the library’s contribution to accomplishing the institution’s mission
3. user or customer centred – the comparison of user expectations with service performance, the gap between expectations and performance and the data that will lead to improved service delivery
4. stakeholder centred – measures will include elements from the above three but also new requirements for demonstrating institutional effectiveness and efficiency. The focus shifts to “what happened because of the outputs” and introduces the concept of outcomes assessment. In the case of libraries, an example would be “how does the library’s information literacy program contribute to the knowledge and skills that students should display by the time of graduation”. The authors argue that the impact of outcomes assessment

is only starting to unfold and will alter institutional and organisational (e.g. library and academic programs) cultures over time.

The challenge for library researchers will be to develop, as Hernon and Dugan note (2003, p.2) “a universal set of measures and data reporting methods from which we can select, given the perspective we are trying to address.”

Terminology

The evolving nature of the measurement debate requires some clarification of the terminology used in this more practically oriented paper, which describes the initiatives in Australian academic libraries. Here, the definitions of Hernon and Dugan are followed, namely

Assessment is a set of initiatives the institution takes to review the results of its actions, and make improvements

Evaluation is narrower, and produces data to improve service and to ensure the results conform to the stated mission, goals and objectives

This paper focuses on evaluation activities which, unlike the concept of assessment, and more specifically outcomes assessment, are well developed and understood and have been used over a long period of time.

The Australian Perspective

Australian university libraries have been implementing performance measurement, benchmarking and quality improvement in library and information services for many years. In the strict sense of the definitions outlined above, these have been primarily relatively simple evaluation activities. That is, the gathering of data to improve services as identified in the library’s mission, goals and objectives.

There are examples, however, of some libraries moving from simple evaluative activities to a more holistic approach to library assessment, as defined above, experimenting with frameworks developed in the business world. A leader in the development of a whole of library performance measurement framework is the University of Wollongong Library in New South Wales. This library adopted the Australian Quality Council’s Australian Business Excellence Framework in 1994 and developed a Performance Indicator Framework which links performance indicators and measures to the library’s goals, critical success factors and stakeholder needs and expectations (McGregor, 2000; McGregor, 2003). It was the first library to win an Australian Business Excellence Award.

Other business frameworks being adopted by libraries include the internationally used Balanced Scorecard. Cribb (2003) describes the experience of Bond University Library (Queensland) in applying this approach.

Council of Australian University Librarians (CAUL) Initiatives

In Australia, national co-ordination and encouragement of collaborative initiatives between university libraries, including the development of performance measurement and benchmarking is facilitated by CAUL, the Council of Australian University Librarians, primarily through its Best Practice Working Group. Significant achievements in this area which have been achieved through CAUL initiatives are

1. the annual collection of statistical information which enables comparison of key library input and output measures, and the ongoing revision and updating of the range of statistics that are collected by university libraries.
2. the development of three performance indicator kits in 1995 which were intended to provide standard instruments to be used by libraries in monitoring their own performance, and sharing this performance information with other libraries
 - a. Library/clientele congruence indicator
 - b. Document delivery performance
 - c. Proportion of sought material obtained at time of visit (Materials availability)

Library/clientele Congruence Indicator

This indicator has now been largely overtaken by the recent development of a national customer satisfaction survey instrument which is discussed later in this paper.

Document Delivery Performance Indicator

The document delivery performance indicator enables libraries to assess the time taken to process and fill document delivery requests on behalf of clients, and evaluate the efficiency and effectiveness of their document delivery practices. The kit has undergone several updates since 1995.

Materials Availability Performance Indicator

Materials availability is defined as the proportion of material sought by the user which is available in the library at the time it is sought. Information from the survey provides data on availability and the reasons for non availability. Although designed in 1995, when the print environment predominated, the instrument continues to be used. CAUL is now looking at developing an electronic materials availability indicator, which recognises the impact of wanted material in electronic form, and the emergence of virtual (as well as physical) visits to the library.

CAUL has developed a Best Practice Database on the CAUL website¹ which enables the loading of individual library results for Document delivery performance and Materials availability surveys, and also provides access to results of

the customer satisfaction surveys. Results can then be compared with both a specific library's previous performance, and the performance of other academic libraries in the database, providing both internal and external performance benchmarking opportunities.

3. the sponsorship of the Performance Measures for Reference Services Working Party established in 1994 to:
 - identify performance measures and indicators currently used to evaluate reference services in Victorian academic libraries
 - identify from the professional literature performance measures and indicators for evaluating reference services in academic libraries

The final report of the Working Party was published in 1998² and summarises the indicators and measures used by undergraduate, postgraduate and academic staff at 8 Victorian universities, based on focus-group interviews conducted during 1996 and 1997.

4. the sponsorship of the project "Best Practice for Australian University Libraries" which received significant funding from the Australian government and resulted in the publication of two major reports published in 2000 "Guidelines for the Application of Best Practice in Australian University Libraries"³ and the companion "Best Practice Handbook for Australian University Libraries"⁴. This project investigated and compiled current "best practice" activities within Australian academic libraries and compared these with activities in selected overseas countries. The term "best practice" used in the study encompassed the implementation of quality frameworks, and the use of benchmarking and performance measurement as tools for the continuous improvement of products, processes and services.
5. the development of best practice guides, such as the CAUL Principles for Library Services to Offshore Students. This is an aid to libraries in providing services to students enrolled in offshore campuses of Australian universities. The CAUL website also provides the opportunity for university libraries to load or make reference to a range of their planning documents (such as building plans, strategic plans, workflow diagrams, skills audits and staff development plans) which would be of wider interest to the academic library community and assist in identifying best practice.
6. sponsoring the development and assisting in the administration of a national customer satisfaction survey instrument (developed by Rodski Behavioural Research and known as the Rodski survey).

The Rodski Customer Satisfaction Survey

This is currently being used by 37 Australian and New Zealand university libraries, many now implementing it on a biennial basis. Survey results provide a guide for potential improvements in the areas of services, collections, facilities and library staff behaviours, based on the gap between how important the service is to the user and the user perception of how well the library is performing in that area. The survey includes a set of nearly 40 core statements or variables, common to all participants. There is also the opportunity for a library to add a small number of customised statements specific to local needs. Respondents to the survey are asked to rank each of the statements according to the level of importance to them (on a scale of 1 to 7), and then to rank the library's perceived performance, again on a 1 to 7 scale and from the respondent's perspective. The detailed analysis provides ranked lists of the statements according to both importance and performance, and subsequently a ranked list of statements according to the gap between importance and performance, the assumption being that the larger the gap, the greater the level of dissatisfaction, and the greater the need to introduce improvement in that particular area.

The statements or variables are grouped into the broad categories - Communication, Service Quality, Service Delivery, Facilities and Equipment and Library Staff. Two further questions ask respondents to rate the overall quality of the library and their overall satisfaction with the library on a scale of 1 to 7. The quantitative results are further informed by free text comments which respondents provide in answer to *1. Comments (including positive and negative) and 2. What is the one area we could improve to assist you?*

Rodski Behavioural Research provides support for the analysis of the survey and has also developed a results website which enables comparison or benchmarking of individual library results from survey to survey, comparison against the means of all other participants in the database and also against the performance of individual participants. The CAUL Best Practice Working Group also surveyed the top performing libraries in the Rodski surveys to share ideas for improvement. La Trobe University Library has published the results of the two surveys so far conducted (in 2002 and 2004), on the library website ⁵.

Ongoing work by CAUL includes:

1. the enhancement of the Rodski survey to include questions of relevance to students studying at a distance.
2. the development of a set of performance measures for digital research and information services. This work will build on the Performance Measures for Reference Services work, detailed above.
3. the development of an information literacy assessment instrument.

Other Benchmarking Activities

Within Australia's 39 universities, formal sub groups have been established where there are commonalities of background and purpose. These sub groups are an avenue to explore and encourage collaboration and exchange of information between institutions and the further pursuit of common goals, one of which being to compete more effectively with the other universities. Such sectors include the Australian Technological Universities ATN (those universities which have come from a technological background), Innovative Research Universities Australia IRUA (universities established in the late 60s to cater for the growing demand for tertiary education and usually located in outer suburban areas of capital cities), the Group of Eight universities GO8 (the oldest, most wealthy and heavily research oriented universities).

These sectors usually involve their libraries, who meet to discuss and share information about areas of common interest, and identify collaborative opportunities such as benchmarking of performance across a range of areas. For example, the IRUA group of libraries has been undertaking the benchmarking of a range of "processing" activities, the objective being to identify the best performers and look at best practice, with the aim of improving individual library performance.

The Australian Higher Education Context

The emphasis on qualitative and quantitative measurements of performance at the institutional level has taken on increasing importance in recent years with the establishment of a formal quality audit framework within the Australian higher education system. The Australian Universities Quality Agency (AUQA) was established in March 2000 to promote, audit, and report on quality assurance in Australian higher education⁶. This independent body is charged with conducting quality audits of self accrediting higher education institutions (primarily universities) on a five yearly cycle. The audits are aimed to be fair, rigorous and authoritative, and the audit reports of individual institutions are subsequently made public on the AUQA website.

AUQA does not impose an externally prescribed set of standards but rather uses as its primary starting point each institution's own objectives. The audits focus on examining the processes planned and in place by which the institution achieves its own defined objectives, the outcomes that are achieved and the monitoring regime that is in place to check and improve outcomes. Each university is expected to devise its own quality management system best suited to meet the specific needs of that university. This includes appropriate quantitative and qualitative measures and indicators.

AUQA does not rank institutions based on the audits, or produce any sort of league table, although inevitably, due to the public availability of the reports, institutional comparisons are made. Each audit is based on a self review conducted by

the university itself which is reported in an institutional Performance Portfolio and submitted to AUQA. This is followed by an audit visit to the institution (usually 3 to 5 days) to test the content and the assertions in the portfolio. AUQA publishes a report on the audit approximately 3 months later, including commendations, affirmations (where AUQA affirms the improvement needs which have already been identified by the institutions) and recommendations. The university is then expected to produce an action plan showing how it will respond to the audit findings, specifically the recommendations. In the next audit round (approximately 5 years later), AUQA will review the institution's response to the first audit. In 2006, the first round of audits of Australian universities will be completed.

The audits include scrutiny of all areas of academic endeavour including the university libraries. Library specific sections of the AUQA audit reports published to date have been focused on assessing the available evidence for

- Library planning and evaluation processes
- How priorities (and funding) are determined
- Client satisfaction with services
- Effectiveness of services provided
- Consistency of services across campuses
- Adequacy of services for overseas students
- Benchmarking of services and best practice

La Trobe University Library – A Case Study

La Trobe University is located in Victoria, Australia. It is a multi campus university, with 7 campuses located in metropolitan (the largest campus) and regional Victoria. It caters for 26,000 students, of which 3,600 are international students and a further 1,200 are located overseas. The campus student populations range from nearly 18,000 at the Bundoora (Melbourne) campus to just 58 at the Mt Buller campus.

The University Library at La Trobe operates as “one library” with a campus library presence at 6 of the 7 campuses. The library has a collection of more than 1.6 million physical volumes, substantially augmented by scholarly information in electronic format, including access to more than 35,000 electronic journals and databases. Due to the disparity in size of the campus libraries and the geographic separation, the library has moved rapidly into electronic resources and multi-site licencing, aiming at parity of access to information regardless of the location of a La Trobe student or staff member. The print collection is also accessible to all students and staff through a fast and efficient intercampus loan and document delivery service.

The University was formally audited by AUQA in September 2004. Preparation for the AUQA audit precipitated the establishment of a self review regime and the articulation of a quality management system at the institutional level. At La Trobe, quality assurance is devolved to a unit level planning and continuous improvement cycle. The University is committed to the benchmarking of these operations and to the continuous improvement of the outcomes of its activities in the light of appropriate measures and indicators of quality assurance and accountability.

In preparation for the audit and the compilation of the Performance Portfolio, each unit (all academic and administrative areas, including the university library) was expected to carry out a self review of activities, identifying the success (or otherwise) in achieving its objectives, targets, or quality improvement initiatives. Outcomes of the review were expected to inform unit strategic planning for the forthcoming year and also include a quality improvement plan for that year. Ongoing self review has now been mainstreamed within the University, with formal review cycles and designated responsibility for the monitoring of these reviews established from the institutional level (e.g. University Council) down to the unit level.

To assist in the self review process the University's Quality Office developed "Quality Management Checklists" for the administrative and academic areas of the University.

Library Preparation for the Audit and the Self Review Process

The University Library has a well established planning process which required little modification to incorporate the requirements of the initial self review. The Library Strategic Plan 2000 – 2004 was developed initially through an extensive process of consultation with staff across the campus libraries. In addition, there was consultation and input from the university community. In each year of the plan, over the August/September/October period and prior to the annual internal library budget allocation, senior library staff review directions, and identify and refine priorities for the following year in a workshop environment. This process incorporates prior input from a wide range of library staff through campus/work area meetings held during the year.

The pre AUQA self review was incorporated into the above planning process. The library developed its own self review checklist incorporating appropriate elements from both the academic and administrative checklists. As part of the review, the library documentation (e.g. policy statements) which supports the evidence presented in the self review was also identified and included. The broad areas which the self review addressed included

1. Planning and management (planning, budgeting, communication)
2. Staff (staff development, position descriptions, staff induction, leave management, performance management)
3. Stakeholders and standards (client service training, client feedback, service standards)
4. Policies and processes (development, documentation, communication, review)
5. Community engagement
6. Outcomes (performance indicators and outcome measures)
7. Response (strengths and shortcomings, opportunities for improvement, actions)

The template used for the library self review is included as Appendix 1.

The section ‘Outcomes’ in the Self Review Checklist revealed some opportunities for improvement for the library. Responses were required for the following questions

1. How do you know you are achieving your objectives? What performance indicators or outcome measures do you use?
2. Are these measures closely matched to the objectives?
3. Do you seek customer feedback from internal and external customers?

Analysis of these revealed a gap in library evaluation activities. Activities being undertaken at the time were limited, somewhat adhoc in their timing and only loosely linked to the library’s strategic objectives. As a consequence and as part of the quality improvement plan, the library identified the need to take a more systematic approach, expand the performance measurement and benchmarking of key library areas and further develop the suite of service standards.

In the absence of a universally accepted set of standard outcome measures (as previously defined) for academic libraries, La Trobe is identifying a mix of input, output and outcome indicators (both qualitative and quantitative), in order to measure performance in achieving its strategic objectives, and to identify areas for improvement. These measures, in the context of a whole of library assessment set, are incomplete, imprecise and continually evolving at this stage. There are difficulties in defining a set that is manageable (avoiding the danger of ‘analysis paralysis’), meaningful at the “whole of library” strategic level and persuasive, at the institutional level, in demonstrating the library’s contribution to the outcomes or impacts of the parent university’s endeavours as a whole.

The measures currently in use and under development by La Trobe University Library are listed in Appendix 2.

Future Challenges

The task for Australian university libraries will be to broaden the current suite of evaluative activities that all are undertaking, to a greater or lesser extent, and move to more outcomes focussed activities. Some progress in this direction has already been described earlier in this paper. Pressure to demonstrate the value that academic libraries add to the Australian higher education system is likely to intensify as the proportion of government funding available to universities continues to contract, and universities are required to generate more and more resources from other sources.

Similar scenarios are being played out in the international arena. For example, Lakos (1998, 1999), in describing the North American environment, outlines the culture of assessment that must be developed “in order for libraries and librarians to be able to work in an environment where decisions are based on facts, research and analysis, and services are planned and delivered in order to maximise positive outcomes and impacts for the library clients”. He contends that, despite the long history of data collection by libraries, assessment activities are still not routinely integrated into library operations, and are rarely applied systematically with appropriate follow-through and evaluation.

Lindauer (1998) documents the influence of the outcomes assessment movement of accreditation agencies in the United States, which now require that institutions provide evidence of their contributions to desired educational outcomes. In a very comprehensive paper, she identifies “important institutional outcomes to which academic libraries contribute, describes specific performance indicators whose measures of impacts and outputs provide evidence about progress and achievement, and offers a conceptual framework of assessment domains for the teaching-learning library”. The schema provided however is very large and complex and is not practical to be implemented in its entirety.

The ultimate challenge will be to select key indicators and associated assessment activities which clearly demonstrate “what impact the library has on the life of its clientele” (Hiller and Self, 2004, p.140).

Notes

1. See CAUL Best Practice website at <http://www.caul.edu.au/best-practice/>
2. See Final Report at <http://www.caval.edu.au/wpr/crig/wp/#WPPM>
3. Wilson, A., Pitman L. & Trahn, I. (2000). Guidelines for the application of best practice in Australian university libraries. Canberra: Dept. of Education, Training and Youth Affairs.
4. Wilson, A., & Pitman, L. (2000). Best practice handbook for Australian university libraries. Canberra: Dept. of Education, Training and Youth Affairs.
5. See LTU Library Survey results at

- <http://www.lib.latrobe.edu.au/about/surveys.php>
6. See AUQA website at <http://www.auqa.edu.au/>

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Appendix 1

LA TROBE UNIVERSITY LIBRARY QUALITY MANAGEMENT CHECKLIST

1. Planning and Management

Planning

- 1.1 Does the Library have a strategic plan?
- 1.2 What is the mission?
- 1.3 What key factors internal and external to the University shape strategy?
- 1.4 Are objectives well aligned to those in the University and Faculty Strategic Plans?
- 1.5 Are staff and students involved in the development of these library plans?
- 1.6 Are library staff involved in the development? If yes, how is this achieved?
- 1.7 Do you regularly review the objectives and plans?

Budgeting

- 1.8 How do you ensure that resources follow strategy within the Library?
- 1.9 Are resource requirements prioritised and the budget regularly monitored to ensure that expenditure is kept within budget?
- 1.10 Is there a plan to replace computers and other equipment at appropriate intervals?
- 1.11 Are library staff consulted on budgetary issues? If yes, what is your decision making process on budgetary issues?

Communication

- 1.12 Are staff in the Library well informed about the University mission and objectives as well as those at library level? If yes, how do you provide this information?
- 1.13 How are library staff kept informed of changes in procedures?
- 1.14 How are library staff kept informed of decisions from elsewhere in the University which may impact on their activities?
- 1.15 How do your staff inform other areas of changes to policies, procedures and processes?

2. Staff

- 2.1 Do senior staff attend the Heads of Schools and Managers training programs conducted by the Personnel Office?

- 2.2 Do staff have well defined position descriptions or duty statements?
- 2.3 Are there processes in place for induction of new members of staff to culture, policies and procedures? If yes, describe these processes.
- 2.4 Do you provide new staff and current staff with service standards or expectations for service levels? If yes, attach further information.
- 2.5 Does the Library encourage staff to enhance their skill base and/or qualifications? If yes, what is the process for achieving this?
- 2.6 How many staff have availed themselves of these opportunities?
- 2.7 Are there transparent workload allocation procedures?
- 2.8 Do you have a leave management strategy?
- 2.9 Are there procedures in place for dealing with staff concerns and difficulties? If yes, outline the procedures.
- 2.10 Is there a process for ensuring that PEDS supervision and reporting is up to date.
- 2.11 Is there a process for ensuring that IPPPS supervision and reporting is up to date.
- 2.12 If you have a multi campus operation is there some recognition of the implications of travel for workload, staff development opportunities?

3. Stakeholders and Standards

- 3.1 Do staff in the Library understand who your clientele are?
- 3.2 Do you know what services your customers/clients expect from you?
- 3.3 Are these expectations in line with your objectives?
- 3.4 Have staff in your area undertaken training in customer service principles?
- 3.5 Do you have standards set for service provision? E.g. turnaround times for services
- 3.6 Are these standards known to all staff in the library? If yes, how do you ensure this is communicated?

4. Policies and Processes

- 4.1 How do you achieve your objectives? ie identify the key procedures, structures, policies
- 4.2 Do you have some documentation of key processes/procedures?
- 4.3 Are these processes well understood by your staff ? If yes, how do you ensure this?
- 4.4 Have you recently reviewed procedures or practices?

5. Community Engagement

5.1 Is there liaison with (as appropriate)

industry, community, government agencies, professional bodies, corresponding university libraries both in Australia and abroad, other educational institutions in Australia including secondary schools, TAFE institutes?

6. Outcomes

6.1 How do you know if you are achieving your objectives? What performance indicators or outcome measures do you use?

6.2 Are these measures closely matched to the objectives?

6.3 Do you seek customer feedback from the internal (staff and/or students) and external customers identified above? If yes, how do you do this?

7. Response

7.1 Have you identified any opportunities for improvement that are within the control of your unit?

7.2 What actions are planned for next year to address these improvement opportunities? What are the resource implications for these actions?

7.3 What strengths or successes have you identified?

7.4 Have these results been communicated to staff in your department? If yes, how has this been done?

7.5 Have you identified shortcomings in services or procedures that are outside the control of the library? What are your recommended responses?

October 2003

Appendix 2

La Trobe University Library

'Whole of Library' key measures and indicators - A Work in Progress

General

Selected indicators from CAUL annual statistics (e.g. salary expenditure as a % of total expenditure)

Selected indicators from library annual statistics, primarily use measures (e.g. building use, number of reference transactions)

Customer satisfaction survey (Rodski survey) (satisfaction level, quality assessment, gaps between importance and performance)

Client feedback from print and electronic suggestion boxes

Services

Information desk surveys (adequacy of support for library users)

Web usability survey (ease of access and use of electronic library services)

Information literacy evaluation (impact on user)

Information Resources (Access and Availability)

Materials availability survey (collection adequacy, shelving accuracy, catalogue error rate, library skills of user)

Intercampus loans and document delivery (turnaround time and fill rate)

Reshelving survey (turnaround time) (pilot project undertaken at one campus)

Order placement (turnaround time) (pilot project undertaken at one campus)

Electronic database usage statistics (under development)

Facilities

Study seating usage survey, including computer workstation usage (adequacy of study space)

Opening hours surveys (adequacy of access to the library building)

Efficiency

Unit cost (monograph and serial processing)

Intercampus loans and document delivery (turnaround time)

Reshelving (turnaround time)

Order placement (turnaround time)

Abstract

Australian university libraries have been implementing performance measurement, benchmarking and quality improvement initiatives over a long period of time. In recent years the systematic approach to evaluation, benchmarking and improvement has become an integral part of the Australian higher education framework as a whole. In 2000 the Australian government, which has overall responsibility for higher education in Australia, introduced a quality audit scheme and established the Australian Universities Quality Agency (AUQA). The AUQA audits focus on the goals and objectives of institutions, and investigate the processes universities have in place to achieve their goals and objectives, including the measuring, monitoring and improvement frameworks. The audits also include scrutiny of the institutions' libraries – how they contribute to institutional objectives and the quality assurance mechanisms in place to achieve this. This paper provides an overview of the key evaluation and measurement activities currently being developed and utilised by university libraries in Australia,

and the higher education context which is catalysing these activities. Particular reference is paid to the work of the Council of Australian University Librarians (CAUL) in these areas, and the national benchmarking initiatives which are being undertaken. The paper also presents, as a case study, the preparation that one university library – La Trobe University Library – undertook for the AUQA quality audit, which was conducted in September 2004, including the “whole of library” performance measurement and evaluation activities which are being developed by the library to measure and monitor performance at the strategic level.

The public library's attractiveness : A quantitative study

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Introduction

In France, people don't frequent public libraries as much as in English speaking countries. About 20% have a library card. Since 1998, the frequentation has stopped growing and tends to decrease slightly though new libraries are regularly being opened. Librarians and authorities find this situation worrying.

How are we to understand this phenomenon? A first solution consists in searching for relationships between social evolutions and the level of frequentation. For many years, I have tried to show that the frequentation of libraries depends not only on external factors [1] such as reading practices or watching television. The users decide to come to the library not only from how they define their needs but also from what they know (or believe to know) about the library's services. If they don't come, maybe it is also because "they vote with their feet" (which means that they don't come). The library doesn't offer what they want. The notion of frequentation covers a result but also the process that leads to it. Coming to the library means that people have overcome the obstacles that prevented the visit. On the contrary, when people don't come, it means that they encounter something that persuades them not to come in the library (or outside of it). What are the characteristics that determine library's frequentation?

Methodology

How is the frequentation of libraries influenced by their characteristics? More precisely, what are the characteristics that increase or decrease frequentation? To answer this question, one method is possible. It consists in asking potential users what kind of services they would like in order to frequent libraries. This method comes up against the problem that we only collect people's statements. We can't

be sure that their behavior (coming to the library) corresponds to their statements. That's the reason why we prefer to base our research on the behaviors really observed rather than the statements.

Our methodology consists in comparing the frequentation of a large number of libraries that differ by their characteristics. We won't compare only two libraries but sets of libraries that share some characteristics. Then we enter into a statistic and sociological way of thinking : beyond their differences related to their history, their setting up, their environment, the fact that they have one common characteristic increases or decreases the probability of a higher frequentation in comparison with another characteristic. Then, we'll deal with libraries as we would for individuals: in spite of their singularity, we can identify social factors that determine their behaviors. Big numbers enable to study populations while identifying statistical regularities that go beyond the singularity of individuals which they are made of.

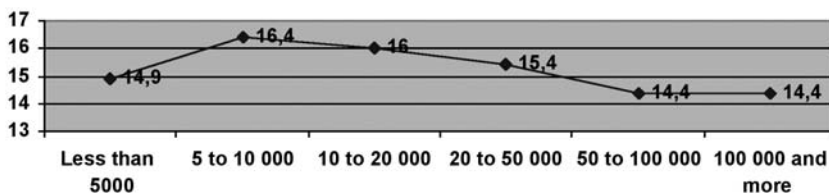
In France, the "Direction du livre et de la lecture du Ministère de la culture" (the section of the Ministry of Culture that deals with libraries) gathers data from a large sample of public libraries every year. For 2002, we have information on libraries from 2942 different cities. For each, we know what the collections are, what the staff is but also the opening hours, the surface area and the frequentation. The sample libraries for which we didn't have any information concerning the number of registered users residing in the city were not taken into account. We'll measure frequentation with this indicator. The total number of registered users is not satisfactory because it directly depends on the size of the town or village in which the library is located. On the other hand, the number of registered users of the city is a good indicator of the attractiveness of the library on the population that have a direct access of this service. So we can compare all the libraries because they are in the same situation: a service offered to a population of which we know the number. In 2002, the rate between the number of registered users living in the city and the number of inhabitants of the city was 15.45% compared to 17.5% for the rate between the total number of registered users and the number of inhabitants of the city. Our selection in the beginning sample lead us to a sample of 2145 libraries. These data allow us to verify our hypothesis because of the large sample of libraries.

The size of the collections

Public libraries exist because they have collections that they make available for the population. Everybody identifies libraries by their collections. Librarians spend a large part of their time and education to manage collections. But is there a relationship between the size of a collection and the frequentation observed in the library?

The number of books

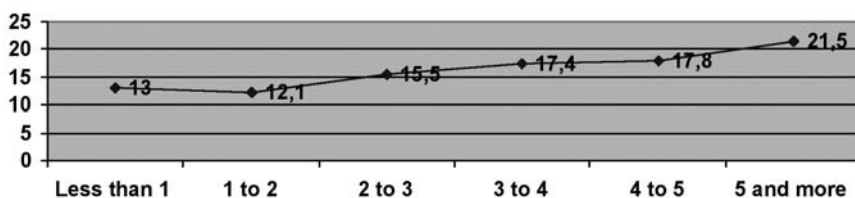
An American research [2] tackled a similar topic trying to establish the relationship between the number of books offered and the level of book circulation. The result was that the growing size of collections tended to increase circulation up to a certain threshold. Beyond this level the relationship was reversed: the growing size was not accompanied by a growth of circulation. We'll study the question from the viewpoint of frequentation (measured by the rates of registered users). Are libraries with large collections of books more frequented than those with a fewer number of books?



Graph 1: On average, the libraries offering fewer than 5000 books attract 14.9% of the population of the city in which they are located.

The relationship between the size of book collection and frequentation is not continuous. If a small collection is accompanied by a low rate of registered users that is the case with the largest collection too. Enlarging the books collection doesn't increase the frequentation.

But the size of collections has to be related to the population of the city. So we'll distinguish libraries according to the number of books they offer per inhabitant. The average of all libraries is 2.8 and this result doesn't change according to the size of the city except in cities of less than 2000 inhabitants where the result is 3.8. But is the frequentation higher in the libraries that offer a lot of books per inhabitant than in the libraries that offer few books?



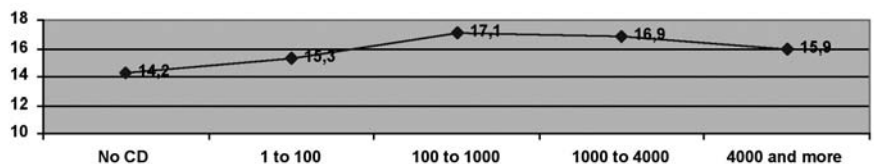
Graph 2: On average, the libraries offering at least 5 books per inhabitant attract 21.5% of the city's population.

In fact, there is a relationship between the number of books per inhabitant and the rate of library frequentation. The most important thing is not really the size of the collection itself, but the relative importance it has compared to the size of the population. The library's attractiveness depends on the relative abundance of books offered.

But the frequentation observed in the libraries that offer an important number of books per inhabitant is perhaps the indirect consequence of the fact that they also offer a number of other services that attract users. If we have a look at CDs or videos, the proposal of at least one PC connected to Internet as indicators of resources of the library, we notice that the relationship between the number of books per inhabitant and the rate of registered users exists even if the libraries don't offer these services. The library's attractiveness really depends on the size of books collections and not only on the means of libraries to offer other services than books.

The attractiveness of the other items (other than books)

For about twenty years, libraries that open have offered a collection of CDs. Doing so, they meet the growing taste for music observed in the population. It's interesting to assess the real consequences of offering CDs on the libraries' frequentation. Is the rate of registered users lower in libraries that don't offer this service? Is the size of the collection a determining factor?



Graph 3: On average, the libraries offering no CDs attract 14.2% of the city's population.

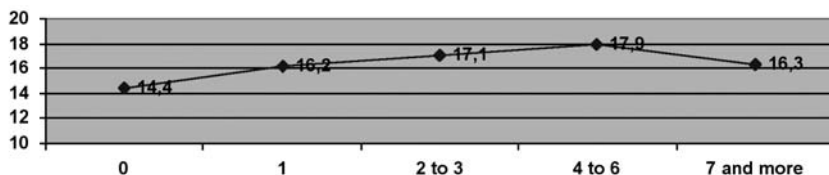
There is a "CD effect". As soon as a library offers CDs, even a small number of them, the rate of registered users significantly increase. Whatever the size of the city, the "CD effect" is observed. Even in small cities (less than 5000 inhabitants), CDs attract a larger population. This kind of item gets the power of catching young and male users and keeping them. Books encounter difficulties to do so. That's the reason why there is a "CD effect" because it attracts more users.

But the rate of registered users stops growing when the collection of CDs exceeds 4000. In fact, as we observed for books, the rate increases when the number of CDs per inhabitant rises. The library's attractiveness depends on the availability of books and CDs.

The attractiveness of videos seems to be lower than that of CDs. The collection has to be important to have an effect. The users are attracted by videos so it's necessary to have a large collection to satisfy the demand. The average rate of registered users inexorably decreases when the number of inhabitant for one video rises: 19.6% when the library offers a video for 8 inhabitants or less and 13.4% when 60 inhabitants or more have to share one video.

The Internet effect

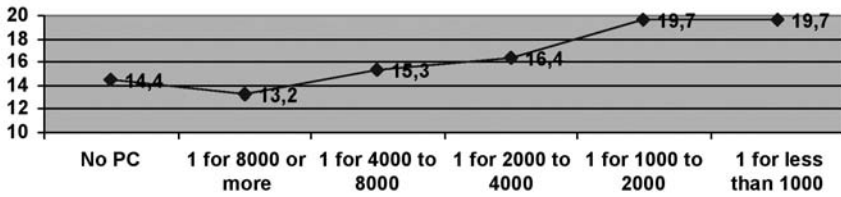
The spread of Internet out of libraries contributes to the growing number of PCs connected to Internet in the libraries. According to our data, in 2002, 43% of libraries offered at least one PC. This service indicates that libraries are part of what our society defines as modernity. Does this “modern” service increase the library's attractiveness ?



Graph 4: On average, The libraries that don't offer any PC connected to Internet attract 14.4% of the city's population.

Offering at least one connected PC immediately increases the average rate of registered users. In other words it means that libraries that don't offer this service struggle to attract a large population. Their low frequentation is due to their lack of participation in modernity. This is not only due to Internet but also to other items than books. Thus, 52% of libraries that don't offer a PC connected to Internet don't offer any CDs or videos either. We can thus ask ourselves if there is an “Internet effect” in libraries with or without “non books” items? Among libraries with books only, the rate of registered users slightly increases when they offer Internet (15% against 13.5%). The “Internet effect” exists but is weak. Among libraries that offer CDs or Videos, the average rate is higher when they get Internet (17.1% against 15.4%). The “Internet effect” exists even when libraries offer CDs or videos. Internet seems capable of attracting new users into the libraries. Consequently, this service is very important if libraries are looking for a large audience.

But is the “Internet effect” observed in every city whatever its size? Is the availability of PCs a determining factor?

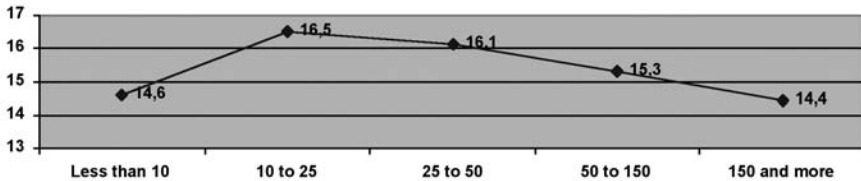


Graph 5: On average, the libraries that offer one PC connected to Internet for less than 1000 inhabitant attract 19.7% of the city's population.

Potential users don't assess the service only according to the way it is promoted. Clearly, we observed that below one PC connected for 8000 inhabitants, this service is not attractive any more because the rate is lower than it is in libraries that don't offer it. On the contrary, the lower the number of inhabitants for each PC, the higher the rate of registered users (particularly below 2000 inhabitants). Attracting and keeping new users with PCs connected to Internet is effective only if libraries offer enough PCs for the size of the population.

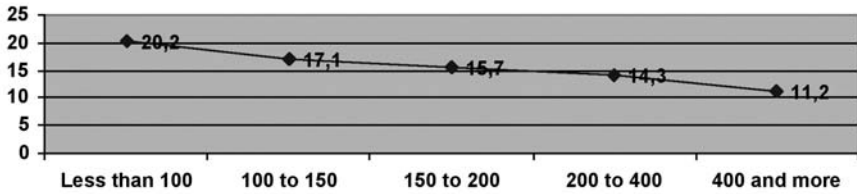
Subscription to periodicals

Some of library users appreciate to find a large choice of newspapers and magazines. According to the last survey "Expérience et image des bibliothèques municipales", 42% of registered users say that they sometimes borrow magazines [3, p. 37].



Graph 6: On average, the libraries that have less than 10 subscriptions to periodicals attract 14.6% of the city's population.

The relationship between the number of subscriptions and the average rate of registered users is discontinuous. A too limited choice (fewer than 10 subscriptions) is accompanied by a low frequentation and it's the same when the choice is too large (150 subscriptions and more). We observed the highest frequentation when the libraries offered between 10 and 50 titles. The choice must be large enough to attract a large audience but not too much in order to try not to loose users. But the number of subscriptions must be connected to the population the library serves. In that way, we measure the relative availability of periodicals in all libraries.

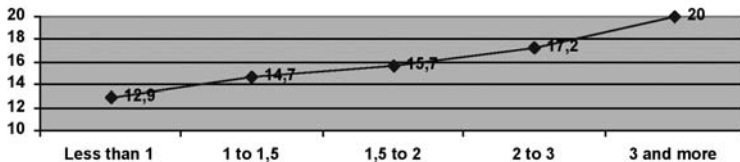


Graph 7: On average, the libraries that offer a subscription to a periodical for less than 100 inhabitants attract 20.2% of the city's population.

The lower the number of inhabitants for each subscription the higher the average rate of registered users. Gradually, the gap is growing between libraries that offer relatively many subscriptions and those not offering many. From the viewpoint of potential users, the relative density of periodicals offered counts more than their bare number.

The users' satisfaction of the collection

The number of items offered by a library doesn't allow knowing how users perceive it. But users probably appreciate the number of books, CDs or videos but they like to find items that correspond to what they are looking for. But how can we measure the assessment of the collection by the users? We can relate the number of loans to the number of items the library has.



Graph 8: On average, the libraries that have a circulation rate of books more than 3 attract 20% of the city's population.

The circulation of books indicates a positive judgment of the users. It is closely related to the level of frequentation. When a book collection satisfies the users, the library attracts a larger part of the population. Though the high level of circulation means a lower availability of items and thus, a deterioration of the collections' attractiveness, we observe a higher frequentation.

The circulation rates of CDs and videos (but the effect is smaller for the videos) have the same effect on the rate of registered users. The positive assessment of these collections reveals their attractiveness on potential users. We observe that this esti-

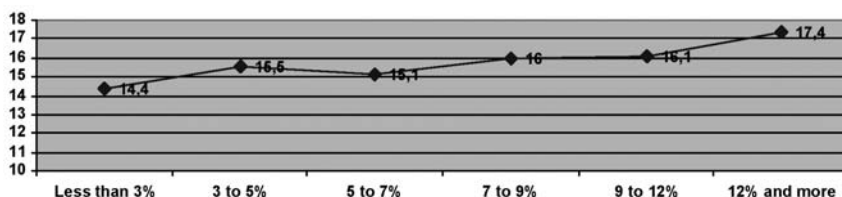
mation is important because the average rate of registered users is lower in libraries with a low rate of circulation of CDs or videos than it is in libraries that don't offer this kind of items. It means that collections that are too small or collections that don't satisfy users don't attract potential users. They pass judgment on what is offered to them and decide to come or not the library. This could show that what we call "offer policy" in France is not always valid. It is possible to educate the users exclusively if they agree a little with what the library offers. In other words, the "offer policy" is thus limited: it can encourage and educate the users to come more often but only if these users had already come before and were satisfied – at least in part – with the library's collection. In a small library, it's possible to offer CDs or videos selected among those that are judged as "essentials" of music or cinema. But those items probably won't be borrowed often and attract only few users. Though, if we want to educate people, we first have to give them reasons to come.

New acquisitions

The collections gather all the items bought by the libraries year after year. It is the result of choices made over a long period of time. Users perceive the library through the collection as the whole. Acquisitions permit to know what the present situation is. They reveal choices made recently by the library. As such we know what the offer to real and potential users is. We want to know what the consequences of acquisitions on the attractiveness of the library are.

The renewal of collections

Acquisitions allow the library to keep its collections up to date. In a world in which topical books are very important, we'll presume that potential users appreciate the renewal of collections. New books (or CDs) benefit from the media coverage; those items exist and are put forward and are made more attractive. In order to measure the renewal of the collection, we'll divide the number of items bought in the year 2002 by the total number of items in the collection.

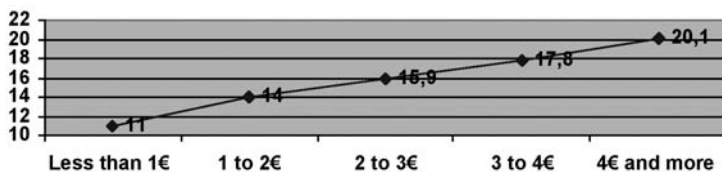


Graph 9: On average, libraries that have a less than 3% rate of the renewal of books collection attract 14.4% of the city's population.

For the book collection, the average rate of registered users seems smaller when the rate of renewal is low than it is when the rate of renewal is high. Offering recent book collection increases the library's frequentation. For the CD and video collections, we observe the same slight trend : a lower frequentation in libraries that renew their collection slightly.

Acquisition budget

Acquisitions depend on the resources of libraries. According to their means, they can buy a certain number of items. The library resources also determine the type of collection because they can thus create more or less diversified collections. Thus we can expect a larger frequentation when the libraries have large acquisition budgets to offer varied collections of books, CDs or videos. In order to be able to compare libraries whatever their size, we'll divide their acquisition budget by the number of inhabitants in the city.



Graph 10: On average, the libraries that have 4 and more of acquisition budget per inhabitant attract 20.1% of the city's population.

The average rate of registered users increases gradually but clearly when the library's resources rise. The rate almost doubles between rich libraries and poor ones. Surely, the cities are rewarded by large frequentation for having done a financial effort. That is true for all the cities whatever the population. In order to attract potential users, the libraries have to offer a recent, large and diverse collection. People assess the library according to a large number of criteria and particularly the collection. This result suggests that the cuts into the library budget may see a large number of users leaving or not coming to the library.

Opening hours and surface area

First Libraries define themselves by the collection they offer to people. We have many precise data on the book collection. But the library is not only a place where information is available. It is a place where users come. The opening hours determine access to the library. Thus we want to measure the effect of the surface area and opening hours on frequentation.

The surface area

On average, the surface area of the libraries is increasing in France. It has tripled between 1980 and 2001 and in 2002, libraries offer 5.4 m² for 100 inhabitants. But what is the relationship between the size of the library and its audience? Are the largest libraries the most attractive?

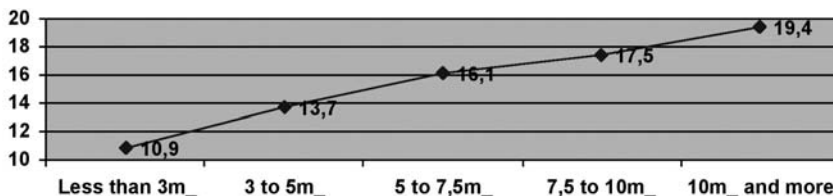
We have to distinguish libraries according to the size of the cities. A small library for a large city may appear as a big one for a village. For a village of less than 2000 inhabitants, there is a critical size around 100m² : under this size, the frequentation is lower than beyond (17.3% compared to 20.3%). On the other hand, the second step at 200 m² has no effect on the library's attractiveness. Why does the surface area appear as a condition for the frequentation of part of the population? Is it because the library can offer a larger collection, a more comfortable and cozy place?

For the cities between 2000 and 5000 inhabitants and between 5000 to 10000 inhabitants, the frequentation increases when the surface area of the libraries increases (from 12.2% to 20.1% for the first and from 8.4% to 18.2% for the second). There is no clear limit. People have more reason to come and to stay in the library when it offers more surface. However, surface is not enough: in cities from 2000 to 10000 inhabitants with a large library budget (more than 3 per inhabitant for the accessions), increasing surface has no effect on the audience of the libraries. It suggests that frequentation depends more on the budget accession than on the surface area. And in fact, among cities of this size, the frequentation is higher for the libraries with large resources and a small surface than in large libraries with a low accession budget (less than 2 per inhabitant) : 19.6% compared to 14.3%. This result is true for the whole sample. For the people who are the target of libraries, the library is first a place with information resources and then only a place, even large. Potential users prefer a small library with a large, recent and diverse collection than a large building with a small collection. The size of the library has an effect but it is not the most important one: among the libraries with a low accession budget in cities from 2000 to 10000 inhabitants, the largest ones have a larger number of users than the smallest (14.3% to 10.7%).

In cities from 10 000 to 20 000 inhabitants, the surface area is also a determining factor of the level of the frequentation. We can identify two thresholds: under 100m² (7.9%) and between 100m² to 500m² (9.7%). From 500m² until 1500m² and more, the frequentation is higher (15% and 16.5%). For a city of this size, it seems to be difficult to attract a large part of the population with a small library. That is the same situation for cities that have 20 000 to 50 000 inhabitants, there is threshold around 1500m²: libraries under this size are less attractive than libraries over this level (11% to 15%). These thresholds indicate what seems to be the optimal surface area of libraries in order to be the most attractive.

In cities of over 50 000 inhabitants, we can't observe a clear trend: the number of users does not increase when the surface area becomes bigger. These cities are very different and sometimes they divide their surface area between a central library and branch libraries.

Another mean to measure the effect of surface on the frequentation is to divide the number of inhabitants to the surface of the library. With this method, we can measure the differences among cities of different size. Are the libraries offering the highest rate of surface per inhabitant the most attractive?



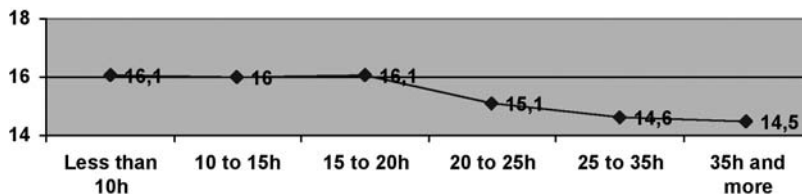
Graph 11: On average, the libraries that offer less than 3m² per 100 inhabitants attract 10.9% of city's population.

There is a clear relationship between the surface offered per inhabitant and the number of users of the libraries. The more the surface available is, the higher is the frequentation. The increasing of the surface permits to accommodate a larger population. It's as if there was a kind of self-regulation of the library frequentation. When the density of users become too high, the potential users turn away from the library because they feel is too narrow. They haven't got enough space to satisfy their expectations of discretion or their wish to remain anonymous.

Whatever the size of the cities, the increasing size of the surface per inhabitant is accompanied by a rise of the number of users. This result can be observed even in the large cities (more than 50 000 inhabitants).

Opening hours

In France, the public libraries have been built in reference to the pattern of the "lecture publique" introduced from the United States. It includes an emphasis on the accessibility through direct access to the collections, signage but also opening hours. Libraries have to be opened during a long time to satisfy the various potential users. For many years, librarians and authorities have noticed that opening hours are too short and particularly in comparison with those in English speaking countries. But what are the consequences of opening hours on the audience of libraries?



Graph 12: On average, the libraries that are opened 35 hours per week attract 14.5% of the city's population.

An unexpected result appears. The audience doesn't increase with the opening hours. On the contrary, it seems to drop slightly. The idea that the library's frequentation would be more important if the opening hours were larger is not confirmed. But if opening hours are not the first criterions for potential users to decide if they'll come to the library or not, we have to check if this factor has no effect even for some libraries.

In a village (of less than 2000 inhabitants) and in big cities (more than 50 000 inhabitants) we don't observe any relationship between the opening hours and the number of users of the libraries. This criterion appears of secondary importance. If people don't come to the library, it's for other reasons.

For libraries that are neither in small villages nor in big cities, opening hours have an effect on the library frequentation. Under a certain threshold (10 hours from 2000 to 5000 inhabitants, 15 hours from 5000 to 10 000 inhabitants, 20 hours from 10 000 to 20 000 inhabitants and 25 hours from 20 000 to 50 000), the rate of registered users is lower than the average. In these middle-sized cities, too short opening hours tend to decrease the frequentation. On the other hand, when the opening hours exceed these thresholds, the rate of registered users doesn't increase. Longer opening hours don't increase the library's attractiveness. Users want the library to be opened long enough to organize their visits but non users don't change their mind because of the longer opening hours. This result seems contradictory with the fact that 34% of non users [3, p. 49] explain that they don't come because "the library is opened only during times that are not convenient". If we measure what non users do (rather than what they tell or think), increasing opening hours doesn't make them come more. However, if opening hours don't modify the frequentation of non users, in the other hand, it has an effect on the users first : as they come more often than the non registered users, they can't come as frequently as they would like. The first effect of limitation of opening hours is that it reduces the number of visits made by users more than it modifies the number of users itself.

The slight effect of the opening hours on the frequentation appears even more surprising when we compare it with other characteristics of the libraries. Whatever

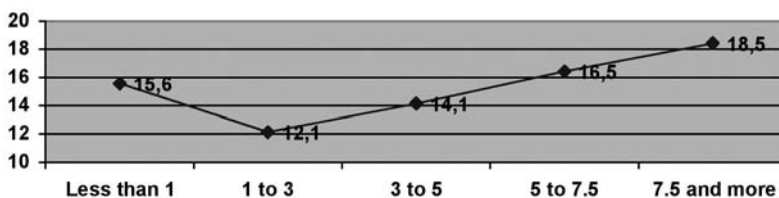
the size of the cities, the libraries with high accession budget or offering large surface area per inhabitant but low opening hours are more attractive than those with large opening hours but little space and a poor collection. As potential users say: “What’s the use of large opening hours if it is to realize that collections or other services are not convenient?”.

The staff

The staff is needed to welcome users, to select, organize and classify the collections and for many other tasks as well. This is one of the characteristics of the libraries. Users see the staff members when they come. Staff are important too because they make the choices that will determine the services of the libraries.

The number of jobs

Nowadays, as public spending is continuously reduced, authorities try to limit the creation of jobs. But is there a relationship between the number of jobs and the number of library users?



Graph 13: On average, libraries that have 7.5 jobs or more for 10 000 inhabitants attract 18.5% of city’s population.

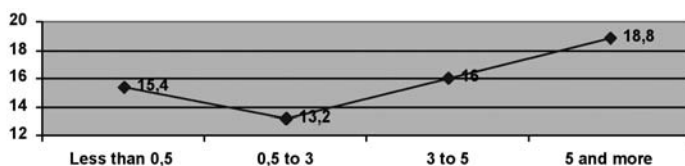
If we divide the number of jobs by the number of inhabitants in the city, we can notice a trend: the average rate of registered users increases with the job density. The exception of the low level can be explained by the presence of many small attractive libraries managed by volunteers in villages (less than 2000 inhabitants). But the trend is clearly that attractiveness increases with the number of jobs. Staff is necessary to offer an attractive service. But, if libraries have staff, maybe it is because they have other resources like an important acquisition budget. In fact, libraries with more than 7.5 jobs for 10 000 inhabitants benefit of 3 of acquisition budget per inhabitant at least in 62% of the cases though it is only 11% the case of libraries with less than one job. That’s the reason why we can ask the question: does the library’s attractiveness depend on the number of jobs or on the acquisition budget?

We notice a specific effect of the number of jobs. But it exists only if libraries have low of medium accession budget (less than 3 per inhabitant). For “rich” libraries regarding to their resources for buying items, increasing of the number of jobs

doesn't increase the frequentation. The number of jobs per inhabitant is a less important determining factor than acquisition budget. Staff attracts potential users especially when libraries can't do it with new items because of tight budget. Increasing the value of the collections, improving the reception and information are some of the possible means to attract a larger audience.

Professional staff

Because of their business, libraries need staff with professional skills. What should those skills be? For example: is cataloging really important? But librarians and authorities partly agree with the need of professional staff in libraries. But is there a relation between the presence of professional staff and the library's attractiveness?



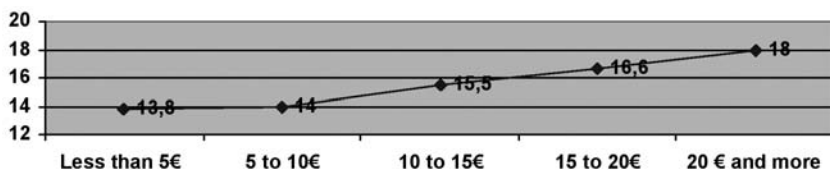
Graph 14: On average, the libraries that have less than 0.5 professional job per 10 000 inhabitants attract 15.4% of the city's population.

Libraries with a large number of professional jobs per inhabitant have a higher frequentation than the others. This trend is true whatever the size of the city. Professional skills are not only a means for librarians to manage the library. These skills also help the librarians to define themselves as a profession. They contribute to the library's attractiveness.

This result is confirmed by another fact: among the libraries that offer one job or more, those that only have professional staff have slightly more users than those that have no professional staff (16.1% compared to 14.8%). The professional staffs are different from non professional because they create a more attractive service.

Staff spending

The libraries are different by the number of jobs and the number of professionals among the staff. Those characteristics depend on their budget. Are libraries with biggest budgets the most frequented?



Graph 15: On average, the libraries that spend 20 or more per inhabitant for the staff attract 18% of the city'' population.

The attractiveness of the libraries clearly depends on the staff spending. When authorities invest in staff, a bigger number of people come to the libraries. We notice the same result whatever the size of the cities.

But what is the effect of staff spending on the frequentation according to acquisitions spending? The libraries with a large budget for the acquisitions also have a big budget for the staff. We have to distinguish the two characteristics. As we noticed for the number of jobs, staff spending has an effect when the acquisition budget is reduced (less than 2 per inhabitant). We observe no effect when the acquisition budget is medium (from 2 to 3) and the effect changes for big resources (from 3) : among the libraries that have the biggest acquisition budget, those with a little staff budget (less than 10) have a larger number of users than the libraries with medium (10 to 20) or high staff budget (20 and more) : respectively 22.6%, 18.2% and 18.6%. When staff spending increases, it acts as a brake on frequentation. Big staff spending does not have always an effect on the frequentation and particularly when it is accompanied by a big acquisition budget. Why does the addition of those two characteristics have no positive effect on frequentation? Our hypothesis is that libraries that spend a large staff don't have as many jobs but expensive ones because of the age of employees or of the high level of the professional staff. These characteristics of staff have no effect on the library's attractiveness. A fact suggests this interpretation: among libraries with large staff and acquisition budget, those with few jobs in relation to their budget but with expensive jobs have a smaller frequentation than those that favor the number of jobs rather than the cost per job (20.2% compared to 16.7%).

Conclusion

The analysis of our data leads us to create the concept of "library effect": the frequentation depends on the characteristics of the service offered to the users; they assess the library through the collections they find and the surroundings in which they are located. The type of collections, the proportion of each type of items (books, CDs, videos), the availability of items, the surface area, the staff and other

characteristics appear as determining. These results lead us to have reservations about the idea that people are coming to the library whatever the services offered. Potential users become real users only if they find some services that suit with their tastes, their concerns or their habits, etc. People “vote with their feet”. Just as the visits of users can be understood by the concept of “user logic”, it would be necessary to study the reasons that lead non users not to come to the library. How do they assess the library? Do the services offered correspond to what they think they need?

Our research appears as a contribution of the knowledge of the relationship between the libraries and the users. It remains to study the relationship between the libraries’ characteristics and the characteristics of the users. What type of users are attracted or dissuaded by the choices made concerning the different types of services offered?

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Abstract:

How can we understand that people frequent public libraries or not? I have tried to show for many years that the frequentation of libraries depends not only on external factors like reading practices, watching television, etc. On the contrary, I believe that it depends on internal factors: the way the libraries propose their services to users partly determine the number and the type of users who come there. But how can we know what the determining factors are?

We can observe a large number of libraries and compare them according to different criteria. In France, the Direction du livre et de la lecture du Ministère de la culture (the section of the ministry of Culture that deals with libraries) gathers data from each public library every year. So we have at our disposal information about budget, staff, collections, premises, users and loans. Until now, these data have been analyzed in a simple way: for example we know what the average collection of CDs in the libraries is. Using the same data, I cross the information about the libraries with information about the users. More precisely, does the rate

between the number of users with a library card and the number of inhabitants of the city depend on the library's characteristics? For example: is the rate higher in the libraries with large hours of opening hours? Do the libraries with a large part of professional staff receive more users than libraries with fewer professionals?

My paper tries to answer such questions. I find some results in order to help library managers define better practices.

Résumé:

Comment comprendre la fréquentation (ou non fréquentation) des bibliothèques? Depuis plusieurs années, je défends l'idée selon laquelle ce ne sont pas seulement des éléments extérieurs à la bibliothèque (le rapport à la lecture, l'air du temps, la télévision, etc.) qui se révèlent déterminants. Je soutiens au contraire l'idée de « déterminants internes »: la manière dont les bibliothèques mettent en forme leurs services décide partiellement de la fréquentation dont elles font l'objet. Mais comment parvenir à identifier les éléments agissant de l'offre ?

Ici il s'agit d'exploiter les données recueillies sur presque toutes les bibliothèques publiques de France. La Direction du livre et de la lecture du Ministère de la culture recueille tous les ans des informations auprès de chaque bibliothèque sur le budget, le personnel, les collections, les acquisitions, les locaux, le public et les prêts. Jusqu'à présent, ces données sont exploitées de façon simple: nous disposons des moyennes et de la distribution des réponses selon la taille de la commune dans laquelle est implantée la bibliothèque. En exploitant les mêmes données, je croise statistiquement les informations sur la bibliothèque avec celles sur la fréquentation. Les bibliothèques disposant du budget d'acquisitions par habitant le plus élevé sont-elles les plus fréquentées? Les bibliothèques ayant un personnel spécifique attirent-elles davantage de public?

Cette communication essaie de répondre à ces questions. Je mets à jour des résultats susceptibles d'aider les responsables de bibliothèques à définir des pratiques à même d'améliorer l'attractivité de leur établissement.

The use of Electronic Information Services and information literacy: a Glasgow Caledonian University study*

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Background to the study

This study reports on two surveys as detailed below, compares the outcomes of the two and draws some conclusions.

The Learner Support (incl. Library) department of Glasgow Caledonian University (GCU) was one of the first ten participants in the LIRG/SCONUL Value and Impact study (July 2003 onwards) which seeks to establish direct evidence of the impact of academic library and information services on the user community. At the planning meeting held in July 2003 it was agreed that GCU would work with Leeds Metropolitan University (LMU) on the theme of Learner Support using the same objectives. The Department of Information Management at Leeds Metropolitan University had previously undertaken work of its own on the usage of electronic information services (EIS) (Hewitson 2000; (Hewitson 2002a; Hewitson 2002b) and GCU collaborated with LMU to develop its own programme of research into the usage of electronic information services (EIS) (Crawford 2003; Crawford et al 2004a,b). This provides baseline data against which the current study can be judged and can also be compared with other studies (Baruchson-Arbib, and Shor 2002; Tenopir 2003; Waldman 2003)

Using methodologies discussed in the seminar GCU and LMU agreed the following joint objectives:

1. To raise awareness of the importance of information literacy amongst students and academic staff
2. To equip students with the skills to become independent seekers and discerning users of information in their studies
3. To integrate information literacy into the student curriculum
4. To enable graduates to be confident in their ability to use information in their work places and their lives

These objectives would be progressed at GCU by an electronically administered survey which would build on the work on the EIS usage baseline data already collected. After internal discussions at GCU it was decided that the questionnaire would also attempt to collect data which would inform the information literacy agenda. The questionnaire for students would attempt to collect more data about how widely electronic information services were being used by students and whether students considered themselves to be information literate by testing themselves against a supplied definition. A questionnaire with similar objectives would also be sent out to alumni.

CURRENT STUDENTS STUDY

Methodology

The design of the questionnaire for students was informed by the previously used EIS student usage instrument and the parallel survey of the information literacy skills of recent graduates (alumni – see below). Although the questionnaire was not piloted it was circulated internally for discussion and altered slightly after consultation with the University's Market Research Officer. The software chosen, on the advice of the Market Research Officer, was Survey Monkey, a web based product, which automatically calculates and updates results, presenting the data in tabular form, which can be easily analysed and cross tabulated. The questionnaire was mounted on all Library computers on Friday 20th February 2004 and taken off the following Tuesday by which time 451 responses had been obtained. Given the University's student population, at the time, was 15,269 a minimum valid sample is about 375.

Sampling frame

At the time of the administration of the survey GCU had 15,269 students, both undergraduate and post graduate, of whom approximately 60% were female and

40% male. Full time students accounted for 71.39% of the total, the remainder of whom were part time or distance learning students. Of these only about 200 were distance learners. The percentage of students by year is as below. The percentages for the first three years is similar although there are slightly more students in third year. For later years/categories the percentages drop off sharply.

Table 1: Percentage of students by year

Year of study	Percentage
First year undergraduate	20.53%
Second year undergraduate	20.87%
Third year undergraduate	22.02%
Fourth year undergraduate	11.08%
Non year undergraduate	11.18%
Postgraduates	13.87%

(Figures supplied by GCU Corporate Applications and totals exceed 100%) These data may be compared with Table 2 below. The University is divided into eight Schools. (See Table 3 below). The two largest Schools are Caledonian Business School (24.17% of students) and Nursing, Midwifery & Community Health (18.61% of students). The respondent percentages in Table 3 resemble overall student percentages although in the following Schools there was a higher percentage of respondents than students: Caledonian Business School, Health & Social Care (more than twice the number of respondents than School students), Law & Social Sciences and Nursing, Midwifery & Community Health. In the following Schools there was lower percentage of respondents than students. Computing & Mathematical Sciences, Engineering, Science & Design and Life Sciences.

The staff and students at GCU are a well studied group as evidenced by GCU's Library Survey, Evaluation and Research Work website <http://www.lib.gcal.ac.uk/research/index.htm> and their characteristics are well understood. It should be noted that not all respondents answered all questions so components of subset data do not always add up to the subset total.

Results

Some general information was collected about the respondents for cross tabulation purposes. Respondents were asked about their year of study:

Table 2: Year of study at Glasgow Caledonian University

Year of study	Percentage	Number
First Year	40.7%	181
Second Year	22.5%	100
Third Year	18.4%	82
Fourth Year	17.1%	76
Fifth Year or more	1.3%	6

Total Respondents 445
(6 skipped this question)

There are about twice as many first year respondents as 2nd to 4th years which opened up interesting analytical possibilities which are discussed below: 2nd to 4th years offer a fairly even spread of data, about 20% each and the percentage of respondents broadly reflects the overall student body.

Respondents were asked what School they studied in:

Table 3: School

School	Percentage	Number
Built & Natural Environment	5.6%	25
Caledonian Business School	33.4%	150
Computing & Mathematical Sciences	2.7%	12
Engineering, Science & Design	4.7%	21
Health & Social Care	16.9%	76
Law & Social Sciences	12.9%	58
Life Sciences	4.7%	21
Nursing, Midwifery & Community Health	15.8%	71
None of these	3.3%	15

Total Respondents 449
(2 skipped this question)

The high percentage of responses from some Schools and the low response from others reflects previous survey work.

Gender

Table 4: Gender of respondents

Male	42.3%	189
Female	57.7%	258

Total Respondents 447

(4 skipped this question)

The ratio of male to female respondents reflects the gender balance of students within the University as a whole.

Mode of study

Respondents were asked whether they studied full or part time

Table 5: Mode of study

Mode of study	Percentage	Number
Study full-time	94.4%	425
Study part-time or Distance Learning	5.3%	24
Other	0.3%	1

As with most survey work previously undertaken at GCU, part time and distance learning students are greatly underrepresented in proportion to their numbers.

Internet use

Respondents were asked if they used the Internet for their studies and 84.5% responded that they did (57 respondents skipped this question)

Internet use declines with year of study as Table 6 shows

Table 6: Internet usage by year of study

Year of study	Percentage	Number
First year	38.4%	126
Second year	22%	72
Third year	19.5%	64
Fourth year	18.5%	61
Fifth or more	1.6%	5
Total	100%	328

Respondents were asked to list up to three websites which they had found especially useful for their programme. (196; 43.4% of respondents skipped this question which is interesting information in itself) The remaining 255 (56.6%) listed a total of 607 websites although it is not always clear what they were. Table 7 lists the most popular

Table 7: Most used websites

Website	Frequency of use
Google	101
Athens	30
Yahoo	28
Blackboard	20
Scottish executive	12
Science Direct	10
Anatomy TV	9
Hotmail	9
My Caledonian (portal)	8
Library website	8
Financial Times	7
Emerald	7

The respondents are mainly reporting on access to websites, rather than the sites themselves. The important thing is that respondents are ranging over many sites and many are only mentioned once which shows growing independence in information searching. Most of the websites relate to paramedicine or some form of business study. (Inhouse websites in bold)

Respondents were asked if they used Athens authenticated and other information databases in their studies: 53% replied that they did. This compares well with the surveys in Spring 2002 and early 2003 which showed levels of Athens registration of 36% and 49% respectively but must raise the question of whether a peak is being reached.

Respondents were then asked to list up to three databases which were especially useful for their programmes. Table 8 lists the most used databases.

Table 8: Most frequently used databases

Database	Frequency of use
Cinahl	40
Medline	34
Ovid	22
Emerald	12
Keynote	12
Ingenta	10
Proquest	9
Westlaw	8
Science Direct	8
Amed	8
Mintel	7

Respondents listed some 228 databases, notably fewer than websites, showing a continuing preference for web searching over database searching. Searching by subject is unchanged from the EIS study with a continuing emphasis on paramedicine and business subjects.

Respondents were asked how essential EIS were for the completion of their programme. The results are in Table 9 below.

Table 9: Importance of EIS for the completion of programme

Importance of EIS	Percentage resp.
EIS are essential for the completion of my programme	66.3%
EIS are of some use for the completion of my programme	30.3%
EIS are of little use for the completion of my programme	2.9%
EIS are useless for the completion of my programme	0.5%

EIS are now essential for almost two thirds of students, compared with 69.5% in the EIS study, a slight fall.

Respondents were asked if they had a computer at home and 78.4% replied that they did which is virtually unchanged since this question was first posed to students in survey work about four years ago. However only 51.1% reported having access to the internet at home, a surprisingly low figure and a big fall from the EIS study, 78% - survey 1; 72% - survey 2.

Information searching on the Internet from home produced a varied response as Table 10 shows

Table 10: Use of the Internet for information searching at home

Information searching at home	Perc.resp.
I use the Internet at home all the time to search for information	22.2%
I use the Internet at home some of the time to search for information	31.6%
I infrequently use the Internet at home to search for information	9.4%
I never use the Internet at home to search for information	36.8%

122 respondents (27%) skipped this question and the largest percentage gave a negative answer but a majority of respondents do use the internet at home to look for information some or all of the time.

Information literacy

The questionnaire concluded with a section on information literacy.

Respondents were asked if they thought that information literacy would be important in finding work after graduation (they were supplied with a definition of information literacy): Two thirds (62.8%) agreed that it would be important but almost 30% did not know which can be compared with the alumni experience (see below); (123) skipped this question. However all first year students agreed with the statement.

Those who had agreed that information literacy would be important in finding work were asked to say why. There were some 118 usable responses which broke down into 9 categories (See Table 11 below)

Table 11: Role of information literacy in finding work

Factor	Frequency
Finding a job	58
Essential for work	29
Keeping up to date	14
Research	4
Time saving	4
Evidence based practice	3
Continuing professional development	2

(The table continues on the next page).

Exercising independent initiative	2
Communicating within work	2

In the minds of the respondents the principal function of information literacy in finding work was direct job seeking via suitable websites and finding information about appropriate careers. One noted:

‘because for a start you need to be information literate to find a job in the first place’.

The possession of information literacy skills was seen as an essential skill with which to impress employers. One commented:

‘it is a key skill that future employers find important and normally ask for in interviews and application forms’

The computer and the information it carries is seen as essential to a modern working life. Another observed succinctly remarked:

‘As society becomes more dependent on the technology, if you’re not a user then you’re a loser’

Keeping up to date and research were other factors. Paramedical students were quick to see the link between information literacy and evidence based practice. The independence and scope for initiative which information literacy offers was also mentioned and this is clearly relevant to the CDP agenda.

Respondents were asked to compare their current information literacy skills with those they believed they possessed when they started university. See Table 12 below

Table 12: Changes to information literacy skills as a result of attending university

Level of information literacy skills	Poor	Average	Good	Very good
When I started university my IL skills were	12%	46%	32%	10%
Now my IL skills are	1%	13%	58%	28%

Clearly respondents feel that attendance at university has greatly improved their information literacy skills and indeed 64.9% (two thirds) confirmed this; 17.7% said that it had not improved their information literacy skills and an almost identical number did not know; 100% of first year students felt that their information literacy skills had greatly improved as a result of attending University. Respondents were asked to give reasons why they thought this was the case. The

results are shown below in Table 13. There were 5 main reasons for believing why they thought their information literacy skills had improved.

Table 13: Reasons for improvement in information literacy skills

Reason	Frequency of response
Need to collect information for programme	25
Frequency of use	23
Obligated to use	23
Previous training/knowledge	19
Attended IT skills course	13
Other IT learning at GCU	6
Increasing confidence	6
Using information sources	6
Better access to information	5
School training	3
Frequency of internet use	2
Reasons mentioned once	4

Some respondents may have had difficulty disentangling IT and information literacy skills but ‘Need to collect information for programme’ still comes top. However ‘Frequency of use’ and ‘Obligated to use’ shows how relentless the pressure to use electronic systems is and the influence these factors have.

Finally respondents were given the opportunity to make general comments but these related only to local housekeeping issues.

First year students

First year students accounted for 40.7% of respondents and this offers an opportunity to compare the experiences of new students with the overall results in certain key questions. This presents a somewhat varied picture. The overall figure for use of the internet for study purposes was 84.5% but for first years this was slightly less – 78.8%. However 64.6% of first years use Athens authenticated and other information databases, compared with 53% overall which may point to a growing sophistication of use. On the other hand fewer first years (58.6%) considered EIS to be essential to the completion of their programmes than the overall figure (66.3%) Slightly more first years than the overall figure have access to a computer and

access to the internet suggesting that these factors are more fundamental to their lives than older students. Intensity of use of the internet at home does not seem to vary greatly from the overall figure. Slightly fewer first year students (59.2%) than the overall figure (62.8) thought that information literacy would be important in finding work; 45% of first years thought that their information literacy skills were good, implying that they had brought some skills from school, compared with 32% overall; 53.5% thought that their information literacy had improved as a result of attending university, compared with 64.9% overall which could either mean that their skills were good on arrival or that they had not had time to benefit from university attendance.

THE ALUMNI STUDY

Methodology

While the first questionnaire aimed to collect data about current students the second questionnaire was aimed at alumni and collected data about the alumni's student experiences but also collected further data about their subsequent experiences and how they perceived the information literacy agenda in the workplace.

Because alumni are located throughout the UK and indeed overseas (there were six respondents from overseas) online administration was not an option and the traditional paper questionnaire was used. The sampling frame was based on the GCU alumni database and used names and addresses of alumni who had graduated between about 2000 and 2004. This produced a list of about 3000 individuals. As the Alumni Officer post was vacant at the time the database was somewhat out of date and over 50 potential respondents were found to have moved house. About 3000 questionnaires were posted out and 453 usable questionnaires were returned, a good response in the circumstances. Questionnaires were distributed and returned between about March and May 2004.

Results

Alumni profiles

71% of the respondents were between 21 and 40 with 46% being under 30: 19% were between 41 and 50 and 10% were over 50. Despite this relatively young profile the perspective of respondents was largely historical as indicated below.

Female respondents (64%) greatly outnumbered males (36%) which resembles undergraduate responses to questionnaires.

81% currently have access to the Internet at home with males (88%) more likely to have access than females (77%).

70% had studied full time with the remaining 30% having been part time or distance learning.

The respondents were drawn from 95 different programmes, the first 30 of which are listed below (Table 14). They broadly reflect teaching areas within the University with paramedicine featuring largely.

Table 14: Most common programmes

Programme	Number of respondents
BSc Health Studies	33
BA Social Science	31
BA Business Studies	24
BA Nursing Studies	19
PG Dip. HR Management	16
MBA	16
BSc Quantity Surveying	16
BA Accountancy	15
BSc Occupational Therapy	14
BA Law	12
BA Commerce+Info. Management	11
BSc Physiotherapy	10
BSc Optometry	10
BSc Psychology	08
MSc Info.+ Admin. Management	08
BSc Electrical Engineering	08
BSc Podiatry	08
BSc Human Nutrition + Dietetics	07
BA Hospitality Management	07
BA Consumer+Management Studies	07
PG Dip. Health+Safety Management	06
BSc Instrumentation with Applied Physics	06
BA Risk Management	06
BA Marketing+Communication	06
BA International Travel+Info. Systems	06

(The table continues on the next page).

BSc Building Surveying	05
BSc Biosciences	05
BA Public Admin.+ Management	05
BA Combined Studies	05
PG Dip. Construction Management	04

Of the 110 occupations listed, the top 30 are given in Table 15. Again they broadly reflect the learning and teaching agenda of the institution. The category civil servants included senior public servants, both in the UK and abroad. Among the less frequently occurring occupations were Member of the Scottish Parliament (MSP) and actor.

Table 15: Most common jobs

Job	Number
nurse	47
management	36
teacher	30
unemployed	18
occupational therapist	15
consultant	13
physiotherapist	12
optometrist	11
surveyor	10
student	09
HR manager	09
researcher	08
Health+Safety consultant	08
engineer	08
civil servant	08
accountant	08
project worker	07
retail supervisor	06

(The table continues on the next page).

radiographer	06
podiatrist	06
administration assistant	06
social worker	05
police officer	05
midwife	05
clerical officer	05
senior administrator	04
orthoptist	04
marketing	04
IT training officer	04
dietician	04

Internet use

Respondents were asked what information sources they had used at University. 54% had used the Internet: while 46% had not. Those who had used the Internet listed websites which they had used (Table 16). The list, of course, includes databases but reflects patterns of EIS usage at GCU. Only 29 had been used by two or more users and 87 occurred only once, suggesting a wide range of searching activities. A total of 116 sites were listed.

Table 16: Most frequently used websites

Website	Number using them
google.com	26
Medline	16
Yahoo	11
Cinahl	11
gcal.ac.uk	09
RCN	07
Athens	06
medical journal sites	05
Dept.Health site	05
bbc.co.uk	05

Only 29% had used Athens authenticated and other information databases which compares fairly well with other data (Crawford et al., 2004 b).

Table 17: Most frequently used databases

Most frequently used databases	Number of users
medline	33
cinahl	25
ovid	07
BIDS	06
emerald	05
ingenta	04
clic [library]	04
swetsnet	03
cochrane	03
science direct	02

Again there are no surprises here. Only 36 databases were listed although several were really websites which reflects historical, rather than current patterns of activity.

Respondents were asked about the importance of EIS in the completion of their programme:

Table 18: Importance of EIS for the completion of programme

Importance	Frequency
EIS were essential for the completion of my programme	26%
EIS were of some use for the completion of my programme	49%
EIS were of little use for the completion of my programme	20%
EIS were useless for the completion of my programme	5%

Although 75% thought EIS were essential or of some use only 26% considered them essential

Respondents were then asked to report on information sources used since University.

92% reported that they use the Internet now, a figure approaching double the percentage who used it at University. There was no gender difference. The list of websites actually used totaled 334, far more than the total used by respondents while at University. Of these 251 were mentioned by only one respondent with 83 being used by two or more people, confirming the pattern of wide ranging use. The top ten were as below. The paramedical agenda is noteworthy.

Table 19: Websites most used for work

Websites used for work	Number of users
google.com	62
show.scot.nhs.co.uk	30
Scottish exec.	29
yahoo.com	27
bbc.co.uk	23
RCN	13
HSE	13
medline	12
DTI	12
CIPD	12

However only 42% reported using other information databases. This was predictably a much lower total of 91 (Table 20), comprising 73 mentioned only once and 18 mentioned twice or more. The top ten are shown in Table 20.

Table 20: Other information databases used

Other databases used for work	Number of users
medline	19
cinahl	14
athens	11
google.com	07
scottish parliament database	05
ovid	05
microsoft access	05

(The table continues on the next page).

emerald	05
lotus	04
lexis-nexis	03

Again there is evidence of a paramedical agenda and there is a general congruence between databases used at university and those used at work. Paramedicine and business/management studies are the area where this is most evident.

Respondents were asked to rate the importance of EIS in their work:

Table 21: **Importance of EIS for work**

Importance	Frequency
EIS are essential in my work	49%
EIS are of some use in my work	43%
EIS are of little use in my work	5%
EIS are no use at all in my work	3%

92 % considered EIS to be essential or of some use in work, with nearly half considering them essential. Slightly more males than females considered them essential while slightly more women than men thought they were of some use.

Respondents were asked to rate the frequency of accessing the Internet for information searching:

Table 22: **Frequency of accessing the Internet at work**

Frequency of accessing Internet at work	Percentage
I access the Internet at work for information searching all the time	32%
I access the Internet at work for information searching some of the time	44%
I access the Internet at work for information searching infrequently	15%
I never access the Internet for information searching at work	9%

76% of respondents use the Internet at work some or all of the time. Only 9% never use it. There was little gender difference. Respondents were also asked about their frequency of information searching at home. The results were virtually identical.

Information Literacy

Respondents were given a definition of information literacy and asked the following questions based on it:

Do you think information literacy is important in finding work?

81% agreed that it did with slightly more males agreeing than women.

Respondents who had replied yes were asked to say why you think information literacy is important in finding work. The points raised may be compared with the students' replies. They boiled down to:

- Increases the chances of getting a job
- Pre-requisite for professional level work
- Applications for jobs and CVs can be emailed
- Find out about potential employers
- The internet is an up to date source of information about jobs
- The Internet is increasingly preferred for advertising jobs
- Helps with CPD and keeping up to date
- Helps in changing jobs
- Enhances employability

Respondents were asked if they think that information literacy is important at work: 90% agreed that it is. There was virtually no difference between female and male respondents.

Respondents who had replied yes were asked to say why they think that information literacy is important at work. This produced rather more points but again a limited number of themes recurred:

- Essential for work – could not do my job without it
- Access to current information – helps to keep up to date
- Facilitates management decision making
- Gives access to a wide range of information
- A source of up to date information on products and services – EU directives, suppliers' products (e.g. packaging) and patent information mentioned as examples
- Helps to give reliable advice to clients (including NHS patients)
- Helps with problem solving
- Supports evidence based practice (EBP) in the NHS

- Helps to develop initiative and self reliance
- Helps with CDP and career development
- Employers expect it
- Promotes clinical effectiveness
- Can anticipate developments and be well informed
- A self learning tool
- Teaches you to distinguish ‘rubbish’ from reliable information
- Quick and efficient way of communicating with colleagues
- A source of power
- A good way to find information not easily accessible

The comments are valuable not only in themselves but also show that respondents have a good grasp of what information literacy is about and what it can be used for. Some respondents noted that the nature of work is a factor and the office worker has a distinct advantage as a fireman pointed out. One respondent presciently noted that information literacy is a characteristic of graduateness.

Respondents were asked to rate their information literacy skills when they began their University course:

Poor 40%;	Average 41%;	Good 15%;	Very good 4%
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Females tended to rate their skills lower than men, a common response to this type of question.

Respondents were then asked to rate their information literacy skills when they completed their university course:

Poor 6%;	Average 32%;	Good 41%;	Very good 21%
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This presents a picture of considerable improvement although females again rated their skills rather lower than men.

Respondents were asked if their overall information literacy skills had improved as result of attending University

Yes 67%;	No 25%;	Don't know 8%
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There was little gender difference in this response and clearly university attendance has had an impact on information literacy skills.

Respondents who had replied yes were asked to say why their overall information literacy skills had improved as result of attending University. Although the impact of University was clearly substantial it was a little less dramatic than the experience of work. While a few had had prior experience of computer use there were also historical factors at work because so much had changed in a short time.

One respondent who had graduated ‘a long time ago’ (1997) noted that a lot had changed since her day. A few others commented on IT rather than information literacy skills. Many of the comments were fairly predictable:

- Made good use of library facilities
- Increased overall awareness of information literacy
- Needed information literacy skills to do assignments and complete programme
- Learned about research methods/using a wide range of sources
- An introduction to the world of academic research
- Gave time and opportunity to improve skills
- First experience of IT/IL - no access or experience before University
- Increased confidence
- A preparation for working life
- Learned to evaluate and interpret information
- Learned problem solving techniques

There were even one or two people who read books.

Finally respondents were asked if their information literacy skills had improved as a result of working. This produced the following response:

Got better 77%; Got worse 3%; Are unchanged 19%; Don't know 1%

There was little gender difference and there can be no doubt that the experience of work contributes greatly to the development of information literacy skills. Judging by the comments from unemployed respondents unemployment has a correspondingly negative and disadvantaging effect.

The questionnaire concluded with the opportunity for respondents to make any comments they wanted although only about a quarter of respondents made comments. These tended to reinforce points already made, notably the pace of change but a few points came up which could warrant further investigation:

- There were mixed opinions about employers' attitudes to information literacy with some being reported as encouraging while others were not
- Two part time students reported the experience of work as being a distinct advantage in developing information literacy skills which is a reversal of widespread assumptions about the abilities of part time students
- The relationship to work again came up. A respondent who felt that information literacy had helped him to get a better job wrote '[information] literacy skills of about 20-30% importance in my job'
- Two quotes reflect changing views:
 1. *'I have been dragged, if not kicking and screaming, at least wincing, into EIS'*

2. *‘Young people should be leaving school with the basic skills to find employment or further their studies, whilst universities should not have to make up for this failure’*

SUMMARISING KEY INDICATORS

By comparing some key results from the student survey, the alumni as students and the alumni as working people it is possible to build up a longitudinal picture which builds on previous work (Crawford et al 2004b).

- Internet use for study: While 54% of alumni reported that they had used the Internet at University, 84.5 % of current students said they used the Internet for their studies; 92% of alumni reported they now use the Internet, a picture of substantial growth.
- Number of websites used: The total number of websites alumni reported using at University was 116. Current students recorded 607 which they had found especially useful for their programme and alumni record a total of 334 which they consider essential to their present work. Again there is an increase here although alumni are perhaps more focused and concentrate on ‘favourite’ sites.
- Usage of Athens authenticated and other databases: Only 29% of alumni had used Athens authenticated and other databases while at University but 53% of current students do so; 42% of alumni reported using databases other than the freely available Internet now. In terms of total number of databases used alumni as students used only 36 while current students recorded 228. Alumni now use a total of 91.
- EIS essential for completing programme: While only 26% of alumni felt that EIS had been essential for the completion of their programme, more than double the number of current students (66.3%) thought this to be the case; 49% (nearly half) of alumni consider EIS essential to their work.
- Improved information literacy skills: 67% of alumni believed that their information literacy skills had improved as a result of attending University and 77% felt that the experience of work had improved their information literacy skills; 64.9% of current students felt that their information literacy skills had greatly improved as a result of University attendance, one of the few indicators which shows little difference between alumni and students.
- Importance of information literacy in finding work: This indicator showed a major difference between students and alumni. While 62.8% of students agreed that information literacy is important in finding work almost 30% did not know but 81% of alumni agreed that it is important. Furthermore 90% of alumni respondents think information literacy is important at work

These comparisons show a picture of continuous improvement over the period c. 1995 -2004 and a growing appreciation of the importance of information literacy but this appreciation is more marked among alumni than students. The impact of the workplace in promoting an understanding of the importance of information literacy is crucial.

CONCLUSIONS AND RESEARCH QUESTIONS

It was clear that respondents broadly recognised the agenda of issues in the questionnaire, understood what information literacy is and empathized with the concept. Understanding was more sharply focused among alumni than students as a result of the former's experience of work.

- The relationship of work activity to information literacy is central: searching for jobs on recruitment websites, planning CVs and using it as an additional factor to impress employers was emphasised by students. Alumni made these points too but also saw it as a tool to support their work, something which gave them a chance to exercise initiative and even have an advantage over their colleagues. It is also a promotion skill. Some even said they could not do their work without it while others saw it as a shared skill/learning experience with colleagues. The implication may even be that people will actively seek information literacy orientated work in future.
- Varying attitudes were reported among employers with some being reported as sympathetic to the information literacy agenda and willing to support it while others were not. There seems to be a further research question here. The nature of work is also a factor as a fireman pointed out.
- Unemployed alumni tend to have sparse replies on their forms suggesting that while work is a spur to using information literacy skills unemployment breeds the opposite attitude.
- Scholarly methods are spreading in the workplace and this, at least, partly due to the skills which were taught at university and the continuing in the workplace of sources used at University
- While the data reported on reflects the views of the students and alumni of a new university there is reason to think that it is more representative. Lee Harvey (2005) has focused on the 'instrumentality agenda' pointing out that the primary need of students is to prepare for employment and find a job, rather than focusing on traditional scholarly concerns.

As to the question of Value and Impact and the issue of making a difference. In assessing the development of EIS usage and information literacy skills it is extremely difficult for any one agency to claim the credit as the previous EIS usage study

showed (Crawford et al 2004b). Students come to University with some skills although information literacy skills are probably the least developed. They are thrust into an environment where most services are IT based and IT skills are needed or have to be developed to use them. It is clear from the study of EIS usage by students that there is at GCU a hierarchy of usage by School, with paramedics at the top, followed by Business School students next and science and technology students last. Paramedicine is notable for its innovative learning and teaching agenda and its continuing relationship of learning and work after graduation. The hierarchy of usage also mirrors the University's retention and progression figures with paramedicine showing the best results and science and technology the worst. This suggests that the Library is linked to other factors and the greatest progress will be made where the commitment to learning and teaching is also greatest. The most important outcomes were not Value and Impact but the emergence of an information literacy agenda which has been shown to be intimately linked to the employability agenda. It is here that the library is making an impact and in a direct way which has not been recognised before and clearly needs further measurement. We need to know more about how the skills we impart extend to the workplace and how these skills may be refined to benefit the future employee. We need to know more about the workplace and attitudes of employers. Some employers are clearly more sympathetic to the information literacy agenda than others. What factors predispose them one way or another?

The direct value of library and information services has long been debated. Does information literacy have a direct value to employers and employees which can be calculated?

Acknowledgements

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Abstract:

Glasgow Caledonian University has a substantial background in survey and evaluation work extending over some ten years – see website <http://www.learningservices.gcal.ac.uk/library/research/index.html> and also

Crawford, John Reviewing a programme of evaluation in an academic library: the case of Glasgow Caledonian University, *Performance measurement and metrics*, June, 2003, vol. 4 , no.3, 2003, pp. 113-121.

More recently the library was one of the first ten participants in the LIRG/SCONUL Value and Impact study (2003-2004) in which GCU chose to focus on the impact of electronic information services on users. The outcomes have been published in three articles and, in a separate project, the Library also worked with a secondary school in a deprived area of Glasgow to assess ICT skill levels among the pupils (the Drumchapel Project).

The outcomes of all these studies have led to a need to focus on the information literacy agenda because very variable skill levels were identified in both the

secondary and tertiary sectors. A need to understand the relationship between information skills teaching in the secondary and tertiary sectors was also identified.

The application centres around reporting on the results of two surveys which were undertaken as part of the LIRG/SCONUL Value and Impact Study:

a survey of EIS/IL skills among undergraduates and a study of alumni (former students who have now graduated). The undergraduate study supports the previous view of steady if uneven progress across different subject areas but also cites as factors the pervasiveness of IT systems in the tertiary sector and their growth in the secondary sector. The subset of data comprising responses from first year students is especially useful as it gives a perspective on new students IL skills. The alumni questionnaire data emphasises the growing importance of information literacy in the workplace and the important role of the University in developing it. Considerable gratitude and respect for the role of GCU was expressed by respondents drawn from all over the world. Information literacy and the student employability agenda have been facilitated by the University and its services.

The two surveys together give an 'all through' picture of IL skills at GCU from new students who have only just completed secondary education, through to the world of work and the application there of IL skills learned at GCU. IL practice and evaluation tends to be sector specific and the research aims to encourage a more holistic approach to research and development in the subject area with a view to developing a holistic agenda which will extend from school experience to a lifetime of work. The research will encourage further development in this new and challenging area.

At the time of applying a new research project has begun, reviewing the relationship between IL skills training in the secondary and tertiary sectors, and interim findings on this work will also be reported on. The data collected is also being used to inform the further development of GCU's ICT/IL training programme.

Statistical indicators on reading and literacy for the “Information Society” versus the ITU’s “technicist” indices¹

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Introduction

On the eve of the second phase of the World Summit on the Information Society (WSIS), measuring progress towards the information society, commonly referred to as “e-readiness”, has become a key issue for governments and communities in a number of countries.

In implementing the WSIS Action Plan, major international UN organizations including the International Telecommunication Union (ITU), responsible for organizing the summit, and neo-liberal organizations such as the World Bank,² the Organization for Economic Co-operation and Development (OECD), and many others³ were involved in developing instruments and statistical indicators for arranging criteria for measuring the information society that can be compared at the international level. Indicators on the impact of new information and communications technologies (NICTs) are considered essential for action planning and development, including achieving the UN Millennium Development Goals.

Looking closer at these statistical indicators from the neo-liberal international organizations, we see a distorted picture of the information society because it is based essentially on indices emphasizing computer and telecommunication equipment. This is not a complete picture because it overlooks human factors and human resource quality and skills.

My proposal attempts to balance “equipment-oriented” data with data based on variables that bring information literacy into focus. The library use patterns of young people and the development of reading and literacy are presented for taking

into account the driving elements behind the information environments of the countries studied and to encourage debate on the determining human factors.

The initial hypothesis assumes that the information society is not a single picture: it is not determined solely by technology or the interplay of economic forces.

Libraries, the most widely used cultural institution among young people, could top the list of components making up the information society. Thus, the definition of the information society is not determined solely by a predefined infrastructure, but also by “sociocultural” rather than technological aspects.

This hypothesis counters the technician approach adopted by some international organizations, including the ITU. This technician approach does not take into account indicators on reading and literacy, behaviours that are nevertheless necessary for establishing a literate, innovative society.

By challenging this prevailing approach, we place our albeit modest approach in the same category as the IFLA.

By questioning the use of inappropriate statistical indicators, we somewhat support the IFLA’s efforts, to ensure recognition of, *among other things, the central role of libraries in the information society*.⁴ This involves arguing for the need to place librarians and libraries, as mediators between information resources and users, among the key players in the establishment of the information society. It could be postulated that literacy and reading and the purposes of these activities, form the bedrock required for establishing the “information society”.

1. Importance of statistical indicators for evaluation and standards

Statistical measurement and evaluation mechanisms, which quantify procedures and the essence of any organization, help improve and develop it. Modern organizational management commonly uses statistical standards and indices.

In the field of library and information service management and marketing, significant work has been done on indicators for evaluation and standards. By way of example, consider the international standards in this field, such as ISO 2789 on statistics and ISO 11620 on library performance indicators.

What are indicators?

Indicators are statistically significant data, either synthetic or analytical, used as standards for measuring or evaluating programs, projects and interventions in terms of resource count and methods. They define concepts and classifications that specify the measurements and data that can be collected and analysed.⁵ The indicators to be used describe what data to collect and at what frequency.

In library management terminology for example, a performance indicator is a [translation] “numerical expression, using symbols or words, derived from library

statistics or other data describing a library's performance" and "includes both raw figures and ratios".

Why are indicators so important?

The descriptive information that indicators provide is useful for every activity and project to justify allocated resources and loads and to identify potential challenges. For a given library, indicators can be used to make comparisons over time for the services it provides. Libraries can also be compared to other libraries, provided that their organizational differences are accounted for, the indicators used are well understood, and the data interpreted with care. Since indicators cannot be taken in isolation from their context, care must be taken not to translate findings into decisions automatically.

Indicators are ways used in evaluation to demonstrate to donors, decision-makers and the public how allocated funds and resources are managed. Public policy is developed primarily from quantitative indicators established by national statistics offices. As such, it is important to mention **Canada's National Core Library Statistics Program**, which provides fundamental data regarding the broad impact of library services on Canadian society.

How are the data collected?

There are various ways of collecting the data based on predetermined indicators. Censuses and surveys are the most widely known data collection methods.

When censuses and surveys are conducted regularly, the indicators can be tracked over time, allowing for evaluation at regular intervals so new strategies can be implemented.

"E-readiness" as an indicator of preparedness for the information society

Since 1998, evaluating readiness for the information society has been developed by the Computer Systems Policy Project (CSPP)⁶ guide for assessing e-readiness for a networked world. This self-assessment tool was designed to help individuals and communities determine how prepared they are to participate in the "networked world". The guide measures the predominance and integration of ICTs in homes, schools, businesses, health care services and government offices, with an additional focus on competition among access providers, access speed and government policy.

The purpose of this statistical description approach, adopted by international organizations, is to make intercountry comparisons. It is based on a composite indicator that includes many factors, from infrastructures to use capacity, and encompasses elements from the economic, legal and political environments.

2. Criticism of statistical indicators based on “technicist” and commercial criteria

Statistically measuring the information society based primarily on a list of core NICT indicators⁷ is the prerogative of large neo-liberal structures. It is currently being harmonized internationally. It could very likely be approved by all international and regional organizations and national statistics offices for assessing the development of the information society.

The ITU digital access index (DAI) and the “network readiness of economies” indicator of the World Bank’s Infodev program, established as a benchmark for implementing the information society, are becoming hegemonic. There are an important reference for governments and donors and identify characteristics that help attract investments.

The devotion to NICT indicators among international neo-liberal organizations indicates the technical and commercial tendencies, which ultimately seek only to broaden the computer and telecommunication sector and boost economies in financial crisis.

If we take the ITU’s digital access index (DAI)⁸ as a model, we see that it focuses on connectivity rate and leans too much toward user solvency (affordability)!

The ITU’s technicist tendency is expressed in its most visible form through the choice of indicators favouring measurement of infrastructure development: 5 (the prevalence of the indicators at number 7: telephony services, international Internet bandwidth per inhabitant, for example), to classify countries rather than cultural information behaviours (reflects only 2 indicators: 1) adult literacy 2) combination of Internet access at primary schools, high schools and universities). The ITU’s tendency is also commercial. It reflects the desire to outfit the entire world with computers with the aim of boosting the economic growth of technology-exporting countries. As such, the DAI figures and measurements do not focus solely on connectivity rate, but lean towards economic profit, as indicated by the “bizarre” choice of using the user solvency (affordability) indicator to assess progress towards a knowledge-based society.

The ITU’s measurement of the information society, which is currently limited to digital equipment sectors, is, in many respects only partial.

Criticizing the ITU’s statistical indicators is vital for developing a new comparative framework that reflects reality and within which the world’s countries can measure their progress towards the information society. From this albeit limited questioning of the narrowness of certain government organizations’ indicators would come a strategic focus.

Our vision is based on the need for taking cultural and human resource factors into account for collectively managing the fast-paced progress of new information

and communications technologies (NICTs). The goal is to introduce library and documentation service data into the official statistics so that existing gaps in this area can be identified and filled.

3. Redefining the cultural indicators and behaviours of young people

To build solid theoretical and practical foundations for a cognitive information society, a measurement should be proposed that is based on statistical indicators on changes in the information practices and behaviours of young people.

As such, the information literacy variables pertaining to library use and literacy development should be introduced and considered as benchmarks for measuring progress towards the information society.

The official statistical indicators for measuring the information society should be redefined so they capture the diversity of young people's information behaviours and attitudes and determine their specific use of NICTs and libraries. It is primarily young people who make up the strategic categories of frequent majority users of libraries and have the capability of using NICTs, the basis of an information society.

Statistical data and surveys among frequent majority users of information services:

The official statistics or surveys, whose data validity is not in doubt,⁹ and previous research¹⁰ on this can provide some guidance for identifying the statistical characteristics of the strategic categories for implementing the information society. With a cross-section of information from various sources, it is possible to postulate that the majority users of libraries and NICTs are young people. Young people read and use computers and the Internet more than their elders.

In fact, according to various information sources and numerous studies, one finding emerges: young people (considered to be a socially marginalized and economically passive group), particularly the educated population, appear to be the majority readers who take NICTs on board.

However, this finding is largely tempered by finer analyses showing complex, contradictory trends: reading among young people is dropping overall, with library use on the increase.

The downward trend in book reading, quantitatively and qualitatively, is a general phenomenon.¹¹ Reading is no longer an intense practice among young people. Most of them have a purely utilitarian relationship with books and tend to disfavour the book culture and even replace it with a communication culture¹² (mobile phones and the Internet) and media culture (television and newspapers).

This widespread trend would support the hypothesis of a certain homogenization of youth culture. In my view, what characterizes today's generations is the feeling of belonging to a specific culture that is age-related and willingly international. We are not talking of a "young culture". Gilles Pronovost pointed out that,

since 1970, we have not been seeing the disappearance of “classic models” in cultural practices, but that [translation] “a new, more eclectic culture has gradually taken over, which, remember, also includes new information technologies”. To ward off lamentation speeches on the reading “crisis” among young people, the statistics show that other types of reading are emerging and that public library use is on the rise.¹³ The number of educated people and rising education level of the population as a whole (Gagnon et al., 1997) and the influence of the educational environment (Baillargeon, 2000) apparently affect the behaviour of young people with respect to cultural activities.

The offering geared towards young people has diversified. Facilities that have been converted into médiathèques and even cybercentres in some cases are indicative of that.

According to the Médiamétrie surveys in France, the emerging communication models, particularly the Internet, draw young people, again educated, who are familiar with or master the new technologies and want access to user-friendly multimedia locations to communicate, produce and socialize freely.

Why are reading and literacy raised to the level of indicators?

Literacy and reading are required for establishing a thinking, creative nation because all innovation flows from that. These behaviours also enable facility with language and writing, new skills needed. Every individual must be “*Information Literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information.*”¹⁴ This is required for economic survival and defence in a complex, uncertain world. The concept of literacy incorporates socio-political aspects in addition to regular reading. The literate person learns to look at the world and become aware of his/her social standing.

Moreover, information from several studies shows that reading and literacy practices are a criterion for evaluating the quality of human resources.

The skills assessment conducted in 2000 as part of the OECD PISA project that included 32 industrialized countries assessed performance in reading, mathematics and science to determine the quality of human resources. The finding from the data established correlations between the reading performance of young people and a country’s position with reference to human development indicators developed by the UNDP. Countries in the lead economically and socially are those where students have the highest marks in reading (the Scandinavian countries, particularly Finland), mathematics (Japan) and science (South Korea).

The cultural behaviour routes of these young players and their visions redraw the new social and power relationships.¹⁵ Their intellectual paths, the physical and

symbolic ways of subscribing for information services, are the template for the new socialization.

This is apparent in some young people, players in the information society who define their promotion strategies in new opportunities for accessing cognitive information or business and relationship opportunities via the Internet and information systems.

The natural extension of reading is NICT access, which is a necessary complement to literacy. For example, according to a number of sources, Scandinavians, specifically Finns, are also the champions of the Internet world. Reading from traditional media is in conjunction with the use of NICTs and electronic media. Several surveys show that, among those who use their computer almost every day as part of their free time, we find the strongest readers.¹⁶

Gaps in the field of statistics today

The goal is to introduce library and documentation service data into the field of official statistics so that existing gaps in this area can be identified and filled. Barriers to data collection, for example, conceptual difficulties, competing priorities, lack of resources and the need to strengthen skills, should be examined and corrective measures proposed.

The linguistic diversity of the content produced and the ability of a population's young people to take NICTs on board and create this content would also be valuable indicators to capture, e.g., content produced by the under-25 age group. What is needed now is to propose indicators on the quality of this content, ideally through multimedia metadata.

This does not just involve disputing the statistical modelling of neo-liberal organizations, but proposing different measuring tendencies, favouring culture, ways of strengthening identity, that emphasize the specific characteristics of the information society. Instead of, or coupled with, general comparative analyses, it would be preferable to analyse specific cases, within a given society or territory.

Analysing the NICT introduction process and types of use cannot be done following a simple logic of transferring a model in which young people would be merely targets, consumers more than players. It involves understanding whether these technologies bring about real change in their lifestyles and assessing how compatible these technologies are with the specific, concrete ways that a local society or economy operates.

Viewing youth as a strategic partner, an essential pressure group in the design and management of information systems, requires a series of studies. The socio-professional profile of majority users of libraries and information systems warrants special attention. Analysing the socio-economic field, identifying their cul-

tural and information behaviours, and establishing new directions are prerequisites to modelling the systems to be introduced.

4. Reaffirming the central role of libraries in the information society

Why should libraries be put forth as a benchmark for assessing progress towards the information society?

Libraries herald social perspectives. Describing a library's objectives and evaluating its services and funds give us an image of an entire society.

The mission of Singapore's libraries is remarkable in this respect in its alignment with socio-economic objectives: [translation] "To improve the nation's ability to learn for the purpose of increasing national competitiveness and promoting a harmonious society."¹⁷

Measuring progress towards a library or service objective requires quantification (either in percentages, time frames or ratios) or a scale, potentially numeric, for assessing an information system's operation.

Evaluating a country's libraries can give us a sense of its readiness for the information society.

Indicators on library use habits and behaviours (no. of registered library users, no. of document loans, document use rate, percentage of titles in the collection requested, average search time for direct access documents, search success rate by catalogue subject) and availability of computerized systems, as expressed by the ISO 11620 performance indicators, Europe's LIBECON system¹⁸ of library service statistics, are references that introduce indicators for objectively capturing the information conditions of each country.

Performance indicators and the ISO 11620 standard mark a new stage in the meaningful development of service evaluation. It is user-focused, and the selected indicators are meaningful with respect to level or quality of user services.

Finally, the key to this performance evaluation lies in the availability of the data required for the indicators: this approach goes hand in hand with implementing an information system.

In using this standard, a library's development policy should be relied on (its missions, its general and operating objectives), and discussion around selecting and implementing these indicators – such as interpreting the results – may clarify or modify those missions and objectives. During this era of crisis and budget cuts when libraries are threatened, using the strategic categories of disadvantaged young people can positively reposition libraries in society and make them indispensable, which they often are not, in the minds of decision-makers and politicians.

In library science, we often refer to under-exploitation of library potential, particularly public libraries.

Fighting the digital divide is the new mission of libraries

This under-exploitation is glaring in disadvantaged communities. Democratization of information is central to a library's mission. As such, it is an opportunity to fulfil its potential and mission.

As to the divide, this is an enormous challenge because it involves not quantifying a status or visible action, but rather measuring the absence of a practice.

Instead, they are processes excluding information access services and systems, referred to by several terms "illiteracy, weak readers, learning disorders, semi-literacy, under-education" that arise under various conditions and must be taken into consideration.

Regardless of the living conditions of disadvantaged populations or the driver behind the inequalities and injustices, learning disability issues and disorders hinder access to information services and prevent the exercise of full citizenship.

The conditions that allow illiteracy to be established as a priority and made into a social problem do not involve just educational and cultural institutions. A cross-sectoral approach is required for acting on society as a whole for creating conditions conducive to the development and strengthening of reading skills. The "weak reader" issue must be analysed as a process in which the players promote a system of meaning and actions that encode this situation based on local interests.

Individuals having difficulties with reading and writing are not a homogenous group. They are subject to socio-economic circumstances and their means are limited to the most frequent physical and psychological difficulties. Their lives follow different paths: their cultural and information behaviours through social or family disruptions, professional disconnect, are represented through their discourse. They are the ones that prerequisite studies for statistical system modelling should capture.

As with libraries in the 1950s and 1960s, which were one of the most important factors in the democratization of learning and the dissemination of culture, NICT access centres will be a springboard for progress towards the information society.

Having NICTs in libraries is the best solution for breaking away from the classic forms of isolation and exclusion by proposing alternative models for the cultural development of the egalitarian information society.

In a context of library virtualization, in which applying Internet technologies to resource and service accessibility seems more satisfactory, virtual libraries allow tremendous flexibility: reference services will be decentralized, interactive, and available on an extended schedule. Once the geographic criterion is no longer a factor, northern and southern young people will be able to benefit from libraries' expertise and vast digital collections, for example as part of distance learning projects. We cannot aspire to equality until young users have taken on board the new technologies in their quest for knowledge.

The important thing is for virtual libraries to meet the objectives of the communities they serve, where applicable, by getting involved in the education and learning process.

Nevertheless, developing documentary communication organizations (virtual reference services) requires redefining information access services and re-inventing multilateral cooperation formulae. This presupposes altering concepts and investigation techniques (for making progress in harmonizing research indicators on reading behaviours) in library and information science.

Conclusion

In this time of globalization, which is accompanied by network expansion and proliferation and the sharing of cognitive and cultural resources, it is crucial that we eliminate boundaries and integrate into the new knowledge society the information disadvantaged who feel out of place there so that everyone can aspire to the same information and education level.

Integrating disadvantaged communities into the information society through public libraries is an opportunity for integrating public libraries into the social landscape and gives them their due place. In fact, the information disadvantaged client base is likely to become more significant. If libraries do not commit to getting actively involved among disadvantaged communities, they will no longer be overlooking a minority, but rather a significant share of their potential client base.

Redefining the characteristics of the information society is a new challenge that could encourage us to use our imagination, which would lead to new research and develop new social integration models. Conceptual difficulties, lack of resources and the need for strengthening skills should be examined and corrective action to reduce the digital divide should be proposed.

Notes

- 1 Indicateurs statistiques de la lecture et de la litt ratie pour « la soci t  de l'information » face aux indices « technicistes » de l'UIT,
- 2 Guide to Measuring the Information Society, OECD Working Party
- 3 See the WSIS thematic meeting “Measuring the Information Society” Geneva, February 7-9, 2005, which included the World Bank, the OECD, and most of the technical organizations: ITU, United Nations Conference on Trade and Development (UNCTAD), UNESCO Institute for Statistics (UIS), UN Regional Commissions (ECA, ECLAC, ESCAP, ESCWA) and the UN ICT Task Force. The meeting was attended by more than 270 delegates from 85 United Nations member countries, intergovernmental organizations, NGOs and civil society.

- 4 See the resolution in the Proceedings from “Libraries @ the Heart of the Information Society”: - Proceedings of the IFLA Pre-World Summit Conference, Geneva, 3-4 Nov. 2003, The Hague, IFLA, 2003, 142 p.-
- 5 Adapted from UNESCO
www.unesco.org/bangkok/education/ict/indicators/introduction.htm
- 6 CSPP’s Readiness Guide for Living in the Networked World.
<http://www.cspp.org/projects/readiness/>
- 7 See the annex to the report “Measuring the Information Society”: Core List of ICT Indicators: Access and Infrastructure Core Indicators.
- 8 The ITU's upcoming 2003 edition of the World Telecommunication Development Report (WTDR) ITU Digital Access Index: World's First Global ICT Ranking
- 9 The three sources used are references whose data collection and processing methods were monitored by an institution specialising in this:
 - A skills assessment, conducted in 2000 as part of the OECD PISA project that included 32 industrialized countries, assessed performance in reading, mathematics and science.
 - International Adult Literacy Survey (IALS) under the auspices of the Organization for Economic Co-operation and Development (OECD).
 - Surveys entitled *Les pratiques culturelles des Français/ Ministère de la culture*, in 1974, 1982, 1990 and 1998.
- 10 IFLA - Global Library Statistics 1990-2000. September 2003 (DRAFT)
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- 11 Olivier Donnat. *Les pratiques culturelles des Français // Les pratiques culturelles en méditerranée*. Tunis: CEDODEC, 1991. P.104. See also Olivier Donnat and Denis Cogneau, *Les pratiques culturelles des Français 1973-1989*, Paris, La Découverte/La Documentation française, 1990, ch. 4 "Le livre")
- 12 See the works of François de Singly on young people and reading. -*Les Dossiers Education et Formation*, No. 24, January 1993, Ministère de l'Education nationale et de la Culture, Direction de l'Evaluation et de la Prospective.
- 13 Monique Lebrun. *The Evolution of Library Use and the Development of Literacy in Adolescence*. - in: 70th IFLA Conference in Buenos Aires, 2004.
<http://www.ifla.org/IV/ifla70/prog04.htm>
- 14 Sandy Campbell. - *Defining Information Literacy in the 21st Century*. - in: 70th IFLA Conference in Buenos Aires, 2004:
<http://www.ifla.org/IV/ifla70/papers/059e-Campbell.pdf>. Division VII.
 - Education and Research

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Abstract

This essay is a synthesis of statistical data and of a set of surveys among young people, the frequent majority users in developing countries.

Variables pertaining to their use of new information and communication technologies (NICTs) and information sources allow us to put forth several significant hypotheses regarding the information society and the digital divide.

We intend to suggest statistical indicators on the evolution of library use and the development of literacy as well as the ability to use NICTs and the information behaviours of young people as benchmarks for measuring the progress made by developing countries to reduce the digital divide and establish solid foundations for a cognitive information society.

This hypothesis counters the prevailing “technicist” approach adopted by the International Telecommunication Union’s (ITU) digital access index (DAI), which does not take into account indicators on reading and literacy, though they are significant behaviours necessary for establishing a literate, innovative society,

The DAI community connectivity indicators were developed by the ITU to follow the objectives of the World Summit on the Information Society (WSIS, Geneva 2003) Action Plan, which advocates a composite index for measuring the information society.

The ITU, the United Nations institution organizing the WSIS instead of UNESCO, is an expression of the “technico-economic” tendency for facilitating the integration of NICTs into our societies and highlights the desire to outfit the entire world with computers to enable economic growth by opening new markets.

This prevailing technicist tendency (see the official literature on the information society) is expressed in its most visible form by the ITU indicators, which favour measuring infrastructure development (telephony services, number of PCs, number of Internet users) to classify countries rather than cultural information behaviours.

This quantitative DAI index, as designed by the ITU, leans more towards economic profit, user solvency and return on investment. Consequently, the digital divide between industrialized countries and developing countries, particularly the marginalized ones (Africa and the Middle East), is imperfectly measured by the ITU's index. Outside the anti-globalization movement, the prevailing approach is rarely challenged and even less so are the quantitative indicators. By questioning the DAI, my proposal attempts to go beyond "equipment-oriented" data and encourage debate on the determining human factors to take into account the basic elements of the information environment of the country under study.

Indicators on library resource use behaviours and habits (registered users, documents loans, etc.) and minimal action for information mastery, as expressed by UNESCO statistics, ISO 11620 library performance indicators and Europe's LIBECON system on library service statistics, include indicators on the information conditions specific to each country.

It is primarily young people who are the strategic categories of frequent majority users of libraries and who are capable of using NICTs, the basis of an information society in developing countries. Comparable statistical indicators of these user categories must be introduced in order to develop a realistic international system for monitoring and evaluating (both qualitative and quantitative) of changes in information behaviour.

This involves disputing hasty statistical modelling by emphasizing the variety of the information behaviours and attitudes of young people and determining their specific use of NICTs and libraries. The proposed approach involves different measurement trends, favouring usage and "e-readiness" developed by several research centers, emphasizing specific characteristics of the information society.

From this albeit limited questioning of the narrowness of certain indicators could come a strategic focus by redefining the indicators of a knowledge-based society, which should be multiple and focused on socio-cultural rather than technological aspects.

In-depth knowledge of strategic categories of users forms the basis of designing and creating virtual libraries. The development of documentary communication organizations and information retrieval systems presupposes a revision of concepts and investigation techniques in library and information science, where theoretical effort is still insufficient.

Résumé

Cet essai est une synthèse des données statistiques et d'une panoplie d'enquêtes auprès des jeunes, usagers fréquemment majoritaires dans les pays en développement. Les variables concernant leurs usages des Nouvelles Technologies de

l'Information et de la Communication (NTICs) et leurs utilisations des sources d'information nous permettent d'émettre quelques hypothèses significatives concernant la société de l'information et la fracture numérique.

Il s'agit de proposer des indicateurs statistiques concernant l'évolution des pratiques de fréquentation des bibliothèques et du développement de la littératie et les capacités d'usage des Nouvelles Technologies de l'Information et de la Communication (NTICs), des comportements informationnels des jeunes, comme critères de référence pour mesurer les progrès réalisés par les pays en développement pour réduire la fracture numérique et établir les meilleurs soubassements d'une société de l'information cognitive.

Cette hypothèse relativise l'approche techniciste dominante adoptée par l'index sur l'accès numérique (DAI Digital Access Index) de l'UIT l'Union Internationale des Télécommunications qui omet les indicateurs sur la lecture et la littératie qui sont pourtant les comportements nécessaires pour former une société cultivée et innovante.

Les indicateurs de connectivité communautaire DAI sont élaborés par l'UIT en application des dispositions du plan d'action du Sommet mondial de la société de l'information (SMSI Genève 2003) qui préconise d'instituer un indice composite de « Mesure de la société de l'information ».

D'ailleurs le choix de l'UIT l'institution onusienne organisatrice du SMSI au détriment de l'UNESCO traduit la tendance « technico-économique » devant faciliter l'intégration des NTICs dans toutes nos sociétés et souligne par la même la volonté d'équiper d'ordinateurs la planète toute entière afin de permettre la croissance économique par l'ouverture de nouveaux marchés.

Cette tendance techniciste dominante (voir la littérature officielle sur la société de l'information) s'exprime dans sa forme la plus manifeste par les indicateurs de l'UIT qui privilégient la mesure du développement des infrastructures (les services de la téléphonie, le nombre de PC pour, le nombre des utilisateurs d'Internet) pour classer les pays au dépens de la dimension des pratiques culturelles de l'information.

Cet indice quantitatif DAI tel qu'il est conçu par l'UIT est trop orienté vers la rentabilité économique, la solvabilité des usagers et les retours sur investissements. Par conséquent, la fracture numérique entre les pays industrialisés et les pays en développement, surtout les plus marginalisés (Afrique et Moyen-Orient), est imparfaitement mesurée par l'indice de l'UIT. En dehors des cercles alter-mondialistes, il existe très peu de contestation de l'approche dominante et encore moins, bien sûr, de remise en cause de ces indicateurs quantitatifs. Par la remise en cause du DAI, ma proposition tente de dépasser les données orientées « équipement » et ainsi de susciter le débat sur les facteurs humains déterminants pour prendre en compte des éléments fondateurs de l'environnement informationnel du pays observé. Les indicateurs des habitudes et les comportements d'utilisations des sources et des

ressources de bibliothèques (Nbre d'inscrits à la bibliothèque, Nbre d'ouvrages empruntés) et des actions minimales autour de la maîtrise de l'informatique, tels qu'ils sont exprimés par les statistiques de l'UNESCO, les indicateurs de performance dans la norme ISO 11620 et par le système européen LIBECON des statistiques des services de bibliothèques, comportent des indicateurs pour des conditions informationnelles propres à chaque pays.

Ce sont surtout les jeunes, qui sont les catégories stratégiques des usagers fréquemment majoritaires des bibliothèques et qui possèdent les capacités d'usage des NTICs, la base de la réalisation d'une société de l'information dans les pays en développement. Des indicateurs statistiques comparables de ces catégories d'usagers doivent être introduits pour élaborer un système international réaliste de suivi et d'évaluation (à la fois qualitative et quantitative), des changements du comportement informationnel.

Il s'agit de réfuter une modélisation statistique hâtive en mettant en exergue la diversité des comportements et des attitudes informationnelles des jeunes et de connaître leurs usages spécifiques aussi bien des (NTIC) que des bibliothèques. L'approche proposée est celle des différentes tendances de mesures, privilégiant les usages et la « e-readiness », développées par plusieurs centres de recherches mettant en exergue les spécificités dans la société d'information.

A travers ces remises en cause, même limitées, de l'étroitesse de certains indicateurs, on aurait alors une visée stratégique dans la redéfinition des indicateurs de la société de la connaissance qui devrait être multiple plurielle et se concentrer plutôt sur les aspects « socioculturels » que sur les aspects technologiques.

La base de la conception et de la réalisation des bibliothèques virtuelles est une connaissance approfondie des catégories stratégiques des usagers. Le développement d'organisations documentaires communicationnelles et de systèmes de repérage de l'information présuppose une réadaptation des concepts, des techniques d'investigation dans les disciplines bibliothéconomiques et des sciences de l'information, où l'effort théorique reste encore insuffisant.

Parameters and indicators for providers of electronic publications evaluation

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1. Introduction

Over the last few years, the first studies about suppliers of electronic publications have begun to appear. They have focused for the most part on evaluating the use of such publications by the academic community. Examples would be the recent work by Tenopir (2003) and, in Spain, that directed by Urbano (2004). Some of these studies, like those by Pullinger (1999) and by Eason, Richardson and Yu (2000), provide detailed information about the influence of contents, their coverage and relevance, and about the technical aspects that affect access and use.

The authors of this paper have carried out previous studies (2004) in which an individualized analysis was undertaken of two providers of electronic content – ScienceDirect and Wiley InterScience-. Afterwards they lie (2004, 2005) in the area of comparative evaluation of information coverage and characteristics of interfaces, functions and services of five electronic content providers widely used by Spanish academic libraries: Emerald, Kluwer Online, ScienceDirect, SpringerLink and Wiley InterScience.

The study was undertaken within the framework of a research project financed by the Universidad de León¹ for the years 2004/2005. The chief objective of this research project has been to gain an overall knowledge of the provision of electronic information, its distribution and use by the academic community in order to allow universities and their libraries to negotiate with the large multinationals in the publishing sector on the basis of objective criteria on quality and utilization.

¹. Evaluación de los proveedores de revistas electrónicas y estudio de la calidad de las publicaciones digitales (2004-2005). Investigador principal: Dra. Rodríguez Bravo.

2. Objectives and methodology

The specific aims of this paper is to present an evaluation model and to share a methodology for the analysis comparative of information distributed, characteristics of interfaces and various functions and added value services of providers of electronic publications. This model has been applied to: Emerald, Kluwer Online, ScienceDirect, SpringerLink, and Wiley InterScience in order to test the validity of the methodology proposed. This analysis will permit the acquisition of trustworthy information on the nature and quality of these systems.

We reckon that works mentioned previously permitted testing the validity of the methodology proposed. Indicators are established to evaluate not just the extent of the materials provided, but also the access structure, characteristics of the interface, functions and added-value services.

The process of evaluation was organized around four parameters (A – D below), within which there were a number of grouped indicators as sub-parameters:

A) Extension of contents

- *Horizontal Coverage:* Volume of electronic publications.
- *Thematic Coverage:* Collections of scientific disciplines.
- *Vertical Coverage:* Retrospective reach of the contents.

The overall digital content available from the various suppliers was tallied up, including serial publications, electronic books, reference works, current protocols and databases. Browsing or navigational access by alphabetic order, categories and type of product routes, and via the listings given in information intended for librarians was used.

B) Access Structure

- *Access Control Systems Used:* Passwords, IP address authentication, digital certification and privileged users (superusers).
- *Search and Navigation Performance:* The levels and fields for searches, retrieval language, record of searches, browsing or navigation categories, fields with hypertext links, granularity of searches, and so forth.
- *Presentation of Results:* Descriptive data, criteria for ordering results and possibilities of ordering them, formats of publications, display of associated graphs and pictures, and similar.

A variety of queries were carried out so as to gain knowledge of the power of the retrieval tools, the range of simple and advanced search forms, the depth of the initial search, the relationships between the products distributed and the specific retrieval tools for some materials (reference works, current protocols and so on).

The authors registered as users of the systems that required registration, in order to have access to capabilities restricted to registered users.

C) Characteristics of the Interface

- *Design*: Correct display, suitable layout for information, highlighting of elements, use of intuitively understandable forms and the like.
- *Ergonomics*: Characteristics and capacity for selection of items, speed and reliability of download and printing of entries, languages available and possibilities for personalizing the access page.
- *User-friendliness*: Syntax of messages, error messages, nature and suitability of user guides and help systems, possible system tips, and so forth.

The searches carried out were used to evaluate the characteristics of the interface and its suitability for users, particularly registered users. Error messages were induced and the help systems were reviewed.

D) Functions and Added-value Services

- *Licensing Modes*: Transparency of information and applicable law, contract availability for publications independently of subscription to the printed format, types of licence, guarantees offered to the licensee, rights to back issues, policies for digitizing, safety and privacy of data, multi-site use and access from outside the institution.
- *Functions*: User registers, quotation systems, keyword notification services, quotation alert functions and linking techniques used.
- *Added-value Services*: Teaching packages, new item sections, service to librarians, service to authors, integration with library services, standardization, statistical reports, and similar services.

A user profile was created to check requests for alerts and to check the Data Subscriber Interface. For the remaining points we have used the information presented in the licence held and offered by the firms on their central websites.

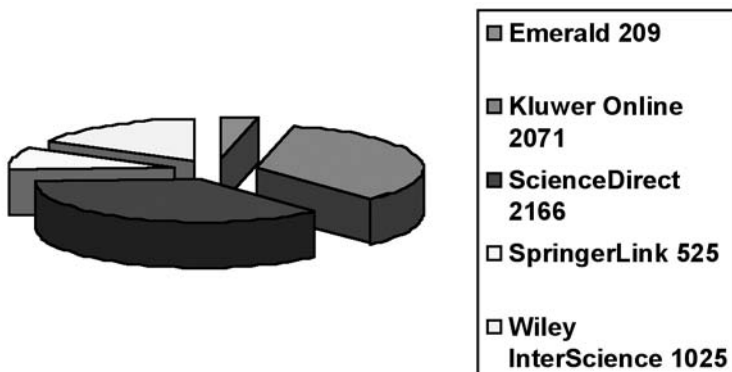
Exploration of the electronic packages was undertaken during the first half of 2004 and was revised during the month of September. For the evaluation, subscriptions taken out by the University of León were used, with the exception of Kluwer which was investigated through an open access route.

It should be noted that in February 2005 was undertaken the integration of Kluwer's journals into SpringerLink package. Consequently, Kluwer platform doesn't exist longer.

3. Summary of results

A) Extension of contents

The analysis includes serial publications, electronic books, reference works, current protocols and databases. Nevertheless, all analyzed providers take care of high-priority way of the electronic journals distribution.



Kluwer Online and ScienceDirect stand out in contrast to the other providers because of their extensive offerings of electronic content. Wiley InterScience is a particularly good illustration of the three chief platforms for access to electronic materials on scientific and technical topics: digital journals, reference databases, and electronic books. Emerald concentrates on serial publications.

Springer's list is striking, as in its 30 collections of books there are no fewer than 2,537 individual publications. The number of electronic books available from Kluwer, at 1,210, is also relatively large. To a lesser degree, this is also true of ScienceDirect, whose 8 series of books run to 961 individual volumes, while Wiley InterScience has more than 500 on offer. Note should be taken of the section relating to reference works in the lists of Kluwer, Science and Wiley. The last of these three rounds out its materials with current protocols and reference databases. ScienceDirect similarly also distributes databases.

From their homepages Emerald, Science and Springer allow easy differentiation of contents available with the specific licence held, those items for which the institution has or does not have a subscription. Materials for which there is a subscription usually provide access to the full text, while non-subscribers only have access to reference details or summaries. As the University of León holds no licence from Kluwer Online, it wasn't possible to determine if this is true for that provider. It is also difficult to determine the full-text contents provided by Wiley InterScience when employing the browsing access routes offered to users from Wiley's web site.

It should be noted that the language coverage for the material from all five providers is almost exclusively English, with a small amount of German and French.

The five providers of electronic contents studied are for the most part multidisciplinary. However, they basically offer publications from the areas Natural Sciences, Health Sciences and Social Sciences. In contrast, the presence of the Humanities in the packages analysed is limited, this being a field represented exclusively in the Kluwer and ScienceDirect lists.

If the area of Humanities is left out of account as having only a token presence in this supplier's range, the extent of thematic coverage offered by ScienceDirect certainly stands out, being noteworthy even in the area of Pure Sciences, which is the field having the smallest number of items. The primary orientation of this provider is towards Natural Sciences and Health Sciences.

Kluwer brings a considerable contribution to all of the thematic areas. The thematic range offered by Wiley InterScience is balanced, having almost a hundred publications even in the area in which it is most limited, Social Sciences. It is particularly strong in the field of Applied Sciences, fundamentally because of its large number of e-books in these disciplines. This provider lacks any Humanities materials.

Emerald is quite different, being almost exclusively concerned with the distribution of materials in the Social Sciences, mainly in Economics and Information Science. SpringerLink, on the other hand, has no involvement in the area of Social Sciences, being strongest fundamentally in Natural, Health and Pure Sciences. Nonetheless, this distributor does have a large number of single or monographic publications in the Applied Sciences in its series of books.

It is not easy to achieve an exact account of the start dates for the publications offered. This is because in some instances there are materials without dates and at other times there are discrepancies in the dates cited. This is made even more difficult by the coincidental complexity of the history of the periodicals involved: there are journals that have ceased publication; back issue files; journals that have changed names, been subdivided, incorporated or merged; and other complications.

The materials offered by ScienceDirect are noteworthy for their long chronological range, with some of its serial publications going back into the nineteenth century. Despite all this, Elsevier's incorporation en masse of journals really begins with the 1990s. A major increase of the availability of electronic materials during the 1990s is noticeable in all providers.

The currency of the collections for Wiley InterScience and to a lesser degree for ScienceDirect and Springer Link is evidenced by the large numbers of materials they hold that were published between 2000 and the time of our evaluation.

B) Access Structure

In light of the results obtained for the indicators established, it is clear that all the suppliers perform adequately on the technical aspects that affect access to the content they offer.

A positive view was taken of systems that could recognize Internet Protocol numbers (IPs) for access. Passwords are required only if one desires to log on as a registered user, a feature that is not provided by Emerald. For their part, Emerald, Springer and Wiley all allow access via Athens login. For Wiley InterScience, there are superusers accredited for the ArticleSelect service.

The five providers evaluated permit searching of contents by indicating thematic categories for browsing or navigation. While the basic fields almost always have hypertext links, some suppliers use them more widely than others. In the case of Emerald, links extend to the classification and keywords, and Springer offers an interesting anchor or one-click point redirecting users to a range of possible links or "linking options".

It was seen as positive if systems had simple and advanced search forms, the latter so as offer a larger number of combinations and limit results by fields. On this point, the search forms for ScienceDirect stand out, being complemented with a Quick Search box.

Positive weighting was given to distributors with positional search boxes, adapted to the point that the user has reached, with an eye to limiting searches to within one publication, to the given volume, or the like. The systems considered here have individualized search engines for those cases in which there is provision of differentiated products: reference works, current protocols and even databases.

We considered it an advantage if there were possibilities for ordering results that the systems offer to users, with Wiley standing out through the use it makes of relevance, chronological order of appearance, and title, and with Kluwer adding the possibility of ordering by authors. All the products have both short-form and full-form presentation. The variant forms of information contained in the latter are exploited most effectively by Science and by Wiley.

The format most often used for full-text documents is portable document format (PDF). On formatting ScienceDirect stands out because it offers up to five different types of end-user presentation, and it also has a high percentage of documents in hypertext mark-up language (HTML). Individualized treatment of graphs and images, the quality of which can be crucial in some areas of academic endeavour, was positively valued.

In some cases there is room for improvement of features relating to access structures, primarily in relation to certain indicators under the sub-parameters for search and navigation capabilities and for presentation of results. While all providers allow

searching on various fields and use basic operators, some do not permit recording of the history of searches and, with the exception of Emerald, there is no session history recorded.

C) Characteristics of the Interface

The evaluation of interfaces was in general good, from which it may be inferred that meticulous attention has been paid to their design and to an intuitively understandable user-system interaction.

In general, screens are acceptably readable, with appropriately contrasting colours, use of layout and indentation to facilitate reading, and suitable fonts and sizes for text. The organizational elements employed by all systems also seem appropriate, with icons or buttons that are sufficiently identifiable.

The use of check boxes and of drop-down menus in the forms offered to users was viewed positively, as was avoiding the direct use of range operators or qualifiers, which normally lead to greater complexity and can cause errors. We also recognize the indisputable usefulness of showing the search strategy employed and of highlighting in the results the specific terms used in the search. The second of these techniques is not in use by Emerald and Wiley.

The ergonomics sub-parameter took into account the facilities for customization available to the system administrator and the possibility of individual personalization of the interface, usually done through user profiles. The widest range here is offered by Kluwer, which allows personal choices for the output formats: typeface, colours, order of elements, and so on, all without need for individual registration.

With regard to the sub-parameter for user-friendliness all providers performed well relative to the indicator referring to the layout of information in differentiated blocks: formal description of the journal, authors, title, abstract, and so forth. A positive view was also taken of generalized and contextualized help support, which all the systems had to a greater or lesser degree. The user guides, tutorials and frequently asked questions of ScienceDirect stand out among these. However, the various systems' error messages are less well done and seldom are comments displayed to users to indicate possible typing errors or to suggest at least some change to fields when searches are unsuccessful.

D) Functions and Added-value Services

It is the final parameter, functions and added-value services, where the differences from one supplier to another are at their greatest. The provision of added-value services (course packs, news, and the like) is adequate, as are the variety of access routes (such as the availability of off-site use, pay-per-view modes, and so on). In contrast, the biggest deficiencies are to be seen in the functions sub-parameter, in

those indicators relating to the quotation systems in use and to the possibility of requesting quotation alerts.

We consider it necessary for Spanish libraries to be able to have licence agreements drawn up in Spanish and covered by Spanish law when it comes to clearing up any disputes that might arise. Yet Kluwer and Springer have their contracts in English and the legislation applicable to their licences is German and Dutch respectively. For its part, Wiley makes its licences subject to American law.

A positive view was taken of a good range of types of licence and the possibility of access to materials in ways complementary to, or independent of, publication on paper, as is the case of E-Choice at ScienceDirect. It is worth pointing out that publishers like Wiley are currently considering distribution of their materials in a form suitable for personal digital assistant devices (PDAs). All the providers considered had options for pay-per-view. Among the models used for this, attention should be drawn to the novel vouchers or tokens for superusers from Wiley InterScience. If these are used on a publication up to an amount equivalent to 115% of its price, then it is automatically included by the supplier in the using establishment's licence.

In most cases, the guarantees offered to licensees can only be described as limited. Kluwer's commitment has led it to deposit its files at the Online Computer Library Centre (OCLC). The obligation accepted by the distributors to continue providing access to their collections of earlier issues is reasonable, and they have stated policies for back-number files. Guarantees on security and privacy of data are expressly stated by all of the firms.

In what they provide, suppliers have progressively included access routes complementary to what is available through an establishment's intranet, so that researchers can gain access to electronic materials from off-campus locations.

With respect to the sub-parameter relating to analysis of functions, it is necessary to point out the unusual case of Emerald, the sole provider not to make use of user registers. For the other suppliers of material, added-value services are largely tied to user registration. ScienceDirect is to be distinguished from the others, because its quotation system indicates articles that have cited the one being viewed and offers quotation alerts on this information. All the suppliers have notification or alert services. The linking techniques employed make use of the digital object identifier system (DOI) and CrossRef. Additionally, Wiley participates in CrossRef Search using Google technology.

The indicators making up the final sub-parameter show that all the suppliers perform adequately. All parts of the serial publications on offer are in electronic form, not just the academic articles in them. Production of teaching materials packs is facilitated and sections showing newly available items are offered. The provision

of specific services for librarians and for authors is more uneven. Because of their added value, the Library Connect programme from ScienceDirect and the portals with information for thematic specializations at Emerald deserve particular notice.

ScienceDirect is particularly good with respect to the indicators for integration and standardization, presenting logos, search boxes and explicit facilities for linking with the online public access catalogue (OPAC) of the institution. It works with SGML/XML document type definitions (DTDs) for mark-up of documents and with other similar standards, such as MathML and XLink. Only ScienceDirect and Springer state that they participate in the COUNTER programme for gathering statistics.

4. Discussion

The evaluation of materials presented above makes it feasible to note the extensive general coverage, density per subject and long back runs of ScienceDirect. The analysis likewise points up the striking position of Kluwer, even more so in the area of electronic books. The horizontal coverage of information is similarly considerable in the Wiley InterScience package. These products, like Springer's, are encyclopaedic in nature, neglecting only the area of Humanities, present solely in Kluwer and, to a lesser degree, that of Science. By contrast, Emerald stands out because of its specialization and orientation towards social sciences.

The thematic organization for most of the suppliers considered could be improved. Only SpringerLink presents categories that are adapted to its contents under clear and self-explanatory labels. A smaller number of thematic classes for Emerald, Kluwer Online and ScienceDirect might be a better option, with subdivision into subcategories where necessary, the solution that Wiley InterScience successfully adopts.

It would be desirable for suppliers of packages to provide more trustworthy information about the contents covered: publications available, subjects to which they are assigned, what their retrospective reach is, whether they are complete texts or abstracts, formats available, and other points. It is difficult for licensees to check on these matters, which are critical matters for licensees in the contractual relationship being established.

The results obtained by ScienceDirect are to be noted, since, besides being the clear leader in the functions and added-value services area, ScienceDirect also brings together a powerful search engine, a flexible interface and a wide range of choices for display.

Wiley Interscience is noteworthy for holding the second place for the last three parameters. The good results for Kluwer's interface, and the correctness and balance of Emerald for the same parameters evaluated should likewise be mentioned.

Nevertheless, it seems appropriate to recommend the introduction of terminological tools to aid in carrying out conceptual searches, which are not satisfactorily

covered simply by the use of keywords. The organization of results might in addition give priority to integrating solutions derived from similarity and clustering techniques.

Similarly, some aspects relating to standardization could be improved, as also the use of statistical reporting on the basis of the COUNTER model, essential for management of the collection by licensees.

It is necessary to carry out further studies complementary to the work reported here, so as to investigate the academic relevance of the electronic materials on offer, the overlap between providers and the facilities for access and functions provided by each of the systems. Such investigations into their quality, together with others covering the data on use of the products of electronic information suppliers, would be an essential empirical contribution to the international debate on the way academic periodicals will be acquired by the university libraries of the future and play a central role during the renegotiation of licences.

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Abstract

Methodology for the analysis comparative of information distributed, characteristics of interfaces and various functions and added value services of electronic publications providers.

Keywords

Architecture of access, Electronic contents providers, Electronic publications, Evaluation, Functionalities, Information coverage, Interfaces, Methodology, Services of added value.

Resumen

Metodología para el análisis comparativo de los proveedores de publicaciones electrónicas: información distribuida, características de la interfaz y funciones y servicios de valor añadido.

Palabras clave

Arquitectura de acceso, Cobertura de la información, Evaluación, Funcionalidades, Interfaces, Metodología, Proveedores de contenidos electrónicos, Publicaciones electrónicas, Servicios de valor añadido.

Promoting Library Services, Designing Marketing Strategies, Evaluating our Past and our Present, Feeling more Optimistic about our Libraries Future

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Introduction

In an age where we need to compete among the myriad of Internet content providers and fight for the limited attention span of our library patrons, marketing and promotion of our services are paramount to our best well-being. While special libraries may tailor their services to their specific target audience, public libraries and academic libraries, by definition, is catered to the general public and to the big academic and student community at large. Because of their heterogeneous market, satisfying the customers' needs of public and academic libraries can be very challenging. So, with the active collaboration with The Greek Ministry of Education and especially with The Special Secretary for Libraries and Archives, we gathered statistics and attention is given to the following parameters:

1. Promotion:
2. Understanding Customer's Needs
3. Community Profiling

And as a consequence designing:

1. Market Segmentation
2. Marketing Plan
3. Objectives and Strategies

A good marketing plan begins with a mission statement that defines the objectives of the library or the information centre, which includes an identification of the target market segments. Realistic and measurable targets set should be subjected to ongoing evaluation process as part of the marketing plan, and used to adjust or revise the marketing activities. Evaluations can be in the form of official measurement systems

including financial accounting, computerized usage tracking, user satisfaction surveys, or the less structured methods of verbal or written feedback from users.

As librarians we should be actively marketing and promoting our library services. The basic aim of marketing is to know and understand our users in order that the library is able to satisfy those needs in an effective way. A marketing plan is an essential tool which will enable us to focus our efforts. The market plan should assess where you are now (market research), where you are going (objectives) and how you are going to get there (strategies).

Greek Libraries – Basic Elements

A. Legal Status.

Greek libraries are under the authority of the following bodies:

1. Ministry of National Education and Religious Affairs

It is responsible for the Greek National Library, 45 Public Libraries all over the country, 32 Academic Libraries of higher education institutions (Universities and Technological Educational Institutions - T.E.I.), 20 libraries of the Organisation for the Establishment of Child and Adolescent Libraries, and all the 499 School Libraries. 19 Libraries are Central ones and they have a greater area under their responsibility. In those areas special converted buses function as lending libraries and serve the remoter places. These 19 libraries have entered the 3rd Finance of European Community having as a goal to support schools at Secondary Education. This project allows them to expand the current network. Each public library is administrated by an Ephorate appointed by the local Prefecture. Public libraries have 2.600.000 books approximately. There are also 22 library buses lending collections of 150.000 books. Also there are the 32 Academic Libraries. These are the libraries of the Higher Educational Institutions and they are under the responsibility of the Senate of the Institutions. There are 21 Central Libraries, 29 Departmental ones, 23 Sectoral ones and 200 libraries that function like study rooms. The Technological Educational Institutes have got a Central Library. The Academic Libraries have got about 4.500.000 books and 15.000 subscriptions in scientific periodicals and magazines. The regulation of their organization is not uniform and they operate independently.

2. Ministry for Research and Technology

It is responsible for Specialized Libraries and the Libraries of the Academic Research Institutes. These are 90 Libraries all over the country and they have 3.000.000 books approximately.

3. *Ministry of Interior, Public Administration and Decentralization*

It is responsible for Municipal and Community Libraries that lie under the authority of the Organisations for Local Communities. The Ministry is responsible for the distribution of funds. However, the whole organization and running of libraries is regulated by the Local Administration Authorities. Some of these Libraries are legal entities of public law, other belong to the Municipal Cultural Centre and other function as a Municipal Business. There are 650 libraries all over the country and have collections that exceed 4.600.000 books.

4. *Other Libraries:*

Libraries of Legacies, Foreign Institutions and Delegations as well as Private ones falls into this category.

Co-operation between Libraries: The co-operation among libraries is not regulated by any legislation although it exists mainly through network interconnections. The 45 Public Libraries of the Ministry of Education have a co-operation among them as well. Libraries - Participation in European Community Programs - Co-operation with other Institutions: Most Academic and Special Libraries have developed intensive involvement both in the domain of Co-operation with Institutions and participation in Community programs.

B. Co-operation Activities:

1. Hellenic Public Libraries Union Catalogue

Web site: <http://vivl-livad.voi.sch.gr/syllogikoskatalogos/>:

The database “Hellenic Public Libraries Union Catalogue” aims to be a collective, unified catalogue including records from collections of all Greek public libraries (apart from the National Greek Library). “Hellenic Public Libraries Union Catalogue” covers all the domain of human knowledge. It is a project of Special training program – supporting education through book mobile of of Levadia Library, started on June 1999 and financed by the European Union. It will be continued up to December 2006.

Characteristics:

- Material included: Bibliographic data for monographs, serials, audiovisual material etc.
- Size: More than 24,000 bibliographic records, including 2,625 records for monographic series.

- Composition of records: The records' bibliographic description is based on the ISBD and the AACR2. The records' subject description and authority control is according to library's custom methods.
- The classification is based on the DDC system or according to Library's custom methods. The records are in ISO 2709 / UNIMARC format.
- Update: Continuously
- Producer: Levadia Central Public Library
- Completeness: It includes records of Levadia, Ioannina, Nafpaktos, Serres, Rhodes, Atalanti and Corfu Libraries.
- Availability of titles: The titles availability is in printed format from the following Greek Public Libraries, according to the code used in records' full display.

100, 1KM, 1mm - *Levadia Central Public Library*

200, 2AN, 2DT, 2FM - *Ioannina Central Public Library*

300 - *Nafpaktos Central Public Library*

400 - *Serres Central Public Library*

500 - *Atalanti Public Library*

600 - *Rhodes Central Public Library*

700 - *Corfu Central Public Library*



2. The National Documentation Center (EKT) has created ARGO,
a web – engine machine that includes:



- EKT's Databases
Databases produced or hosted by the National Documentation Centre (e.g. Hellenic Ph.D. Dissertations Thesis, etc.)
- Humanities Libraries in Greece
Contains the library catalogues of historical research centres and foreign archaeological schools and institutes based in Greece
- Hellenic Academic Libraries
Library catalogues from Hellenic universities and TEI
- Public Libraries
Includes the catalogues of Hellenic public libraries
- Libraries from the World
Includes catalogues and union catalogues from libraries all over the world (e.g. Library of Congress, MELVYL union catalogue, COPAC, etc.))
- Serials Collections
Serials (periodicals) collections (e.g EKT's Serials Union Catalogue, EKT/NHRF Library - Electronic Journals, etc.)
- In collaboration with 200 Greek Libraries has developed and updated the online database of the Union Catalogue Periodical (UPC) of the Greek Science and Technology Libraries (HERMES).

3. Greek School Network

The Greek Schools' Network (GSN - www.sch.gr) is the educational intranet of the Ministry of Education and Religious Affairs (www.ypepth.gr), which interlinks all schools and provides basic and advanced telematics' services. Thus, it contributes to the creation of a new generation of educational communities, which takes advantage of the new Informatics' and Communication Technologies in the educational procedure.

The implementation of the Greek Schools' Network is funded by the Framework Programme for the Information Society (www.infosoc.gr), in close cooperation

8. Wizards for automatic webpage creation
9. Asynchronous distance learning, for hosting and distributing digitized lessons Teleconference
10. Video On Demand delivering streaming educational multimedia material
11. Live Internet transmission (webcasting) of various of various events
12. News (www.sch.gr/news) and Discussions (www.sch.gr/forums)
13. Electronic Magazine Personal Calendar, Personal Address Book, Notes and "To Do", accessible through the World Wide Web
14. Directory Service
15. Voice over IP
16. Online statistics Help-Desk, for immediate solution of technical problems. The Help-Desk is accessible through one-phone 801-11-801-81

4. E-Trikala:

Trikala announced as the first Digital City in Greece by the Greek Vice Minister of Economics C. Folias late last year -- will finish its first phase of development by the middle of 2006, with funding from the Greek Information Society Framework Program. The Digital City ICT applications aim to improve everyday life by simplifying public transactions, reducing telecommunication costs and by delivering new services related to the local way of life. Those ICT applications also offer new methods to enable citizens to participate in policy-making, and help ensure local government and public authorities as guarantors of the local society's proper operation. Every medium-sized city has its own social, economic, geographic or political characteristics. For this reason the digital city can vary from region to region, so that ICT applications enhance local characteristics rather than detract from them. The Municipal Library of Trikala is one of 30 selected in Greece, to join the Greek National Network of Public Libraries. Via this network, the library will have access to catalogues of all Greek public libraries, to special Web portals, but also to a "digital depository of books and periodicals" developed at the national level. Users of the Municipal Library will access a helpdesk located in-house, where PCs with controlled Internet access are installed, in order to view or order articles and books in digital form.

Promotion of Broadband Use

The Digital City will be a successful project only if users become active members and participants of digital affairs. For this purpose "Promotion of Broadband Use" is the first project under development. DSL technology, upgrades the existing cable networks, to ones that can rapidly deliver large pieces of digital information such as photos and video. Two kiosks will be located in public buildings, operating for 10

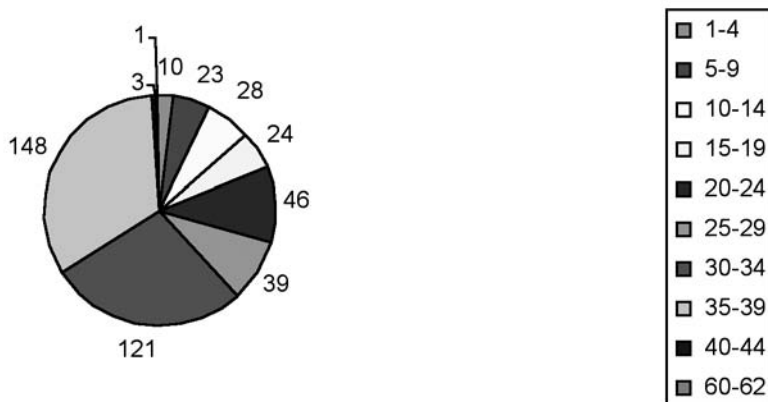
months to present broadband advantages. In the meantime, special events will be organized to present specific applications based on broadband solutions, oriented to groups of citizens (as professionals, lawyers, students, etc.).

C. Statistics:

According to the Report on the situation of libraries, museums and archives prepared in January 2004 for the European Commission's Libraries Sector, DG Information Society Cultural Heritage Applications Unit Digicult, in Greece the situation in Libraries Section can briefly described as the following:

- In 2004, Greece had 10.4 million inhabitants and an area of 131,990 sq. km., giving a population density of 79 inhabitants per square kilometre. Greece spent, in 2000, 0.30% of its GDP on libraries.
- Public libraries in Greece had 669 service points in 2003, 24 per cent of which (about 142) in the Attica region, with 64,501 registered users. The number of volumes in book collections was 9.6 million and 226.3 thousand volumes were added.
- With the exception of a few major libraries (National Library, Library of Greek Parliament) all the other libraries have a restricted number of books. The rate of automation is not very high. The majority of libraries rely on simple software in order to perform simple tasks. Few libraries permit on line access and not all of them have a web site (mainly university and research libraries have).

Hours of computer availability per week



- Higher education libraries in Greece had 70 service points in 2003. The number of volumes in book collections was 6.5 million, and there were 128.4 thousand registered users.
- All libraries have computers – between 1 and 5, were most of them have 3 computers. Two of the computers of each library have dialup access to the Internet, in most cases
- The computers are available to the users from 0 up to 62 hours per week, with an average of 27 hours per week, according to the following distribution:

D. Plans – Proposals:

1. **Select Committee Report on Public Libraries:** The Greek Ministry of Education and especially with The Special Secretary for Libraries and Archives has produced a report on Greece's public library service. The report suggests that the use of technology is presenting public libraries with an extended role, where new technologies can provide a broader social exchange mechanism. ICT can be used as a tool, for example, in life-long learning initiatives, civil society and e-government services. The changes identified in the report will have a profound impact on the nature of the library workforce, which will need a range of capabilities, dispositions and skills to be effective in the future. Its key recommendations are designed to focus attention on libraries' fundamental role in promoting reading and distinguishes between core functions and desirable add-ons. The report calls for far stronger links between national library standards and effective mechanisms to encourage and enable library services to meet, if not surpass, them. It also recommends an action plan for the digitalization of the nation's public library collections.
2. **Creation of a national database** that brings together information about books produced in accessible formats. In this way users can be signposted to organizations that can supply material. A complementary Register of Suppliers will give information on the terms and conditions under which resources are made available and how to get hold of them. This will be extremely useful for the users of the public libraries.
3. **Social Inclusion and Social Exclusion Library Report:** Among its new initiatives, YPEPTH is planning to produce a report on libraries and community cohesion. A major section of the report looks at social inclusion and social exclusion and how libraries fit within national and regional “community” agendas. As well as providing a detailed analysis of the background to social inclusion/exclusion, the report can act as advocacy material as well as making recommendations on priorities for future development.

4. **Learning Packages:** The design of packages consisted of directed learning journeys through the new Greek Public Libraries' website content. They can be used independently by individual staff, ideally with support from a local mentor, or as part of an authority's organized training on work with young people. Significance must be given at why reading and libraries are so important for young people, and at simple and practical ways to welcome and engage young readers and their families. Also the packages aim to increase staff awareness of the library and reading needs of young people and their families - both users and non-users - and to help staff to develop skills and ideas for meeting those needs through the welcome provided by library content, display and activities, and by everyone working in the library.
5. **Schools and Public Libraries Urged to Collaborate in Supporting Young Readers:** New resources are going to be launched to help public libraries and schools work together to give young readers seamless support. Library staff will be provided with practical ideas for building partnerships with schools. It will also outline the policy and research rationale for a much more joined up approach to supporting children's reading. Reading clubs in schools could act as the basis for partnerships with public libraries.
6. **Virtual Reality and Public Libraries:** Our last year report examined the many elements that make up a library, and identifies the trends that are reshaping our ideas of what a virtual public library network can be. It also projects a series of future scenarios, examining the issues, drivers and trends that could have a crucial impact on the future of the virtual reference provided by Greek public libraries.

6.1. Service Philosophy:

The Greek Virtual Reference Service will be created in order to provide a new method of delivering reference services to the clientele of the participating Public and School Libraries throughout the country. It is an additional way to reach users, who use chat software in their daily communication with others. This additional way of providing reference enhances the traditional service philosophy of academic libraries which consider instruction and teaching an integral part of providing reference assistance. The co-browsing function of the software helps support this philosophy by allowing librarians to instruct the patrons in the use of particular databases.

6.2. Service and Performance Standards:

Each library must contribute a certain predetermined number of hours to the GVRS (Greek Virtual Reference Service). During these assigned shifts, the librarian online will answer questions from all participating libraries. At other time, an individual

library may choose to offer the service only for its own clientele. There is no time limit for answering a question, although the librarian should keep in mind that other patrons might be waiting. If a question requires more than 15 minutes, referral to a local librarian may be more efficient. The librarian on duty is not required to answer more than one question at a time. If a second question appears in the queue while the librarian is already answering a question, it will be routed after a few minutes to another online GVRs librarian. If no other librarian is online, the question will be picked up by the Librarians by Request GVRs staff (Tutor.com). Suggestions for appropriate electronic or print resources to help find information for a project or research paper or help in constructing a search statement.

Assistance in the use of electronic resources. For in-depth reference questions or if detailed research assistance is needed, the librarian on duty can choose to follow up by email or can refer the question to a librarian from the patron's host institution. The service is designed to answer reference questions, but general circulation or directional questions may be answered using the library policy pages provided by each institution and available on the GVRs Virtual Reference web site.

6.3. Database Access Policy:

It is important that librarians adhere to the licensing agreements for any electronic resources and databases used. As a general rule, the librarian on duty should use the databases and electronic resources available at the patron's host institution and ask the patron to authenticate before access is granted. The librarian can then co-browse and instruct the patron in the use of the databases. Librarians on duty should only provide patrons access to databases that are accessible via the patron's host institutions.

Each institution will provide a barcode number or other means to access their databases in case legitimate users are having problems authenticating. These barcodes/logins will be available to the Librarians by Request staff and the GVRs librarians staffing the service, but should only be used as a last resort.

6.4. Scheduling

At the beginning of each semester, a schedule will be created using a scheduling software. Each institution will be asked to sign up for a required number of shifts. The scheduling coordinator will make sure that all shifts are covered and will resolve conflicts. Every effort will be made to accommodate individual institution's preferences. If a library is unable to staff the service at its regular scheduled times, they should first request a shift trade through the scheduling software. The scheduling coordinator should be notified if a trade is not possible.

6.5. Quality Control

Providing virtual reference service in a consortial environment means that librarians staffing the service answer questions for patrons from institutions other than their own. This means they will be using online resources they might not be familiar with. In order to maintain the highest standards of quality, all library staff involved need to familiarize themselves with the policy pages and the electronic resources of the participating institutions. The coordinators at each institution are responsible for notifying consortium members of any changes in policies or any specific things that could affect the virtual reference service via the GVR Virtual Reference discussion list. Individual coordinators are also responsible for reviewing the transcripts involving their patrons and their librarians, as well as the survey responses from their library's patrons. They may decide to follow-up by email if the service given to their patrons was not adequate. It is recommended that the transcripts (or a sample of the transcripts) be reviewed at least weekly. Any complaints regarding quality of service should be sent to the quality control coordinator.

6.6. Communication Channels

Ongoing communication is critical to ensure the success of a virtual reference project in a consortial environment. The coordinators at each institution, as well as all the librarians involved in providing virtual reference for the consortium should be subscribed to the GVR and use it to ask questions, discuss issues with their colleagues, or provide needed information about their libraries.

6.7. Privacy Policy

Each institution is responsible for posting on the web page providing access to the service a privacy policy, which explains to the patron what personal information is collected by the service and what is done with this information. This privacy statement explains what we do with the personal information collected from our patrons when they use the GVR Virtual Reference Service. More specifically, it explains what personal information is collected, how it is used, and how long it is kept.

When the patron use the GVR Virtual Reference Service, he is asked to provide his name, institution affiliation, status (faculty, student, staff, etc.), age, time of day question is received, subject areas requested via VRD and email address. This information will build a marketing research database used to add, delete, or change existing services.

Providing his email address allows us to send him a transcript of the session, or to send additional information related to his question. We will disclose his personal information only when it is necessary to answer his request for information. We will also collect some information about his computer, such as the browser version he is

using, and his IP address. We store session cookies on his machine in order to send chat messages, web sites and files, but these cookies will dissolve when his session ends. We keep the transcripts and make them available to supervising librarians for quality control, but we purge all his personal information from the system after 30 days. If one selects the "Anonymous" user option, the librarian will see the information entered in the form, but personal information is purged as soon as the session has been ended.

This privacy policy will be reviewed periodically. If any changes occur, the patron will see the word "updated" next to the Privacy Policy link on the entry page.

6.7. Use Policy

Each institution is responsible for posting on their web site a use policy for the service stating who can use the service and what kind of questions are appropriate.

6.8. Duties of Participating Institutions

1. Policy Page each institution is responsible for creating and keeping up to date a library policy page providing information such as hours, circulation policies, reference email contact, list of databases, list of electronic journals, etc.
2. Staffing: each institution is responsible for staffing the number of hours agreed upon with professional librarians who have been trained in the use of the software.
3. Initial training will be provided by Tutor.com, but individual institutions will then be responsible for training new staff members, and keeping their staff current on changes in the service and the software.
4. Review of Transcripts: To ensure high quality standards, the coordinator of the service at each institution will be responsible for reviewing transcripts (or a sample of transcripts) involving their students and their librarians. This review should be done weekly, so that there could be follow-up if a question was not answered properly. (see section on quality control)
5. Annual report and statistics: each institution is responsible for writing an annual report using the statistics and reports provided by the software and detailing the problems and successes of the service at their university. These reports will be used by the consortium to improve service
6. Access and marketing: Each institution is responsible for providing access to the service through their library home page or other media, and to market the service to its community. The GVRs consortium will be providing guidelines to help market the service. The goal of a marketing plan is to assure marketing goals and objectives are being met, identify changes needed in the marketing mix strategy along the way, and ultimately identify how to increase customer satisfaction.

E. Steps in The Marketing Plan:

1. **Our Corporate Vision and Ambition for the Public Library Service.** The purpose of the Greek Virtual Public Library Service is: “To help deliver the Country’s Public Libraries strategic objectives, by promoting learning, by encouraging reading and literacy, by providing access to information and to digital skills and services, by helping to build community identity, and by adding to the cultural and recreational life of Greece by offering services accessible to all and by making best use of available resources. In doing this we endeavour to ensure our services are accessible to all and that the resources available to us, whether human, financial or material are used and promoted in the most effective, imaginative and innovative ways to ensure value for money. ”
2. **The scope:**
 - Provide comprehensive, efficient and modern Public Libraries and Framework for the Future
 - support their achievement helping to raise standards in schools
 - improve the quality of life
 - build safer and stronger communities
 - promote healthier communities
 - support the economic vitality of localities

It is all part of a plan to make sure libraries remain topical and relevant for young people, not only by involving them in running public libraries, but also by matching reading, learning and information support to their needs.

3. **Underlining the Benefits:** Reasons for the increase include the opportunity for the patron to ‘learn from home,’ and especially “learn how to learn”. Another added incentive from GVRS, is the offer of public long-life learning for all distance educated elderly men and women, no matter where they reside. In light of these goals and objectives, the National Statistic Service in an effort to increase enrollment to the real-time procedures, is gathering data to facilitate meeting these objectives. In scanning the external library environment, marketing staff garnered information in order Greece to remain competitive.
4. **Marketing research** is the function that links the information professional to the customers’ wants and needs. In this process relevant customer-related data is identified that the Greek Public Libraries’ organizational schema already has access to, as well as data that is needed and how it will be collected.
5. **Marketing Mix 5S’s:** Moving on this next step, significance must be given to the marketing mix which is the development of the service, the scope, the strategy,

the system and the solution this collaborative interactive virtual technology provides.

Here is a review of each component:

- **Service:** The VRS provides items including: 1) email reference; 2) and real-time assistance using chat software; and 3) 24/7 access to online resources.
 - **Scope:** This service will be built and adjusted especially to the Greek reality of the public libraries, helping both patrons and librarians finding the best and more accurate resources in the minimum time
 - **Strategy:** Evaluating the 45 Greek Public Libraries, the 499 School Libraries and their in our days services, we will all agree that a new national strategy and its promotion is absolutely necessary for their “renovation”.
 - **System:** Digital technology gives us the key for the creation of a new virtual reference system that can answer to the challenges of the new virtual époque when everything is taking place in real time and
 - **Solution:** Through the use of marketing communication tools such as advertising; media/public relations; printed materials; internet communications; special events and featuring a daily web page of public libraries’ news, called “My GVRS”, the new service will be considered as a solution the increased access to online resources, and the new 24/7 VRD services. The “My GVRS” page pops up each time a patron logs onto an online environment and is frequently used for distributing timely news.
6. **Gathering Current and New Evaluation Criteria:** The staff knows that the detailed records and logs that online transactions offer will yield good evaluation criteria, and that overtime they will be able to add to the initial criteria established. Long term usability and satisfaction will also have to come from the mouths of users. The Greek patrons always complaining for the non-existence of a national system that will enable their hard effort in the hunting of information. Librarians know that the web is not enough and that they can, inside a well –organized network, to provide the right and accurate information showing the paths not only to information but also to knowledge.
7. **Measuring Customer Satisfaction:** To measure customer satisfaction, on a monthly basis, for eight months, on the “My SSU” page, a survey will pop-up asking those using the library’s new VRD service to assess satisfaction with the service. A performance measure objective for customer satisfaction could be at least 80% of those answering the survey offered a rating of good or excellent in areas of professional expertise, wait time, quality of resources. Based upon review of the performance measures and customer satisfaction results, the project team will

implement changes as needed and as resources allow. In Greece especially in The University of Macedonia, The University of Crete and The University of Ioannina has made few but quiet serious steps by implementing e-reference systems, like Ask a Librarian, via email or telephone. It is indicated a demand for the expansion of this service throughout the country.

8. Measuring Customer Behavior

Customer behavior is best measured by criteria that are related to the participation in or completion of a task or activity. Thus the following initial criteria are for the target market online group (elements were gathered by online virtual patrons in the 24/7 Ask a Librarian System of The University of Macedonia):

Evaluation Criteria	Performance Measure Objectives
Number of eligible participants identified	To identify 100% of eligible participants
Number of registrants to participate	At least 50% participate during six month period
Time from initial request to answer	Email and live chat sessions turn around time
Subject categories requested	Subject categories requested, ranked from most to least

9. Review: statistics, and customer satisfaction surveys and

10. **Campaign – Time for Action:** Kick off VRD Campaign. In our vision these separately functioned e-services models can be unified in one, a national one in which each member can deliver, depending to its collection, questions and from general users, and from students, especially Open University’s students, and from pupils following the example of e-tutor that the last 3 years is successfully applied in Boston within the cooperative schedule of The Boston Public Library, Harvard University, City of Boston and Massachusetts Consortium. A National Campaign from the web site of The National Library of Greece, or from the formal web site of The Greek Ministry of National Education, can underline the sense that this service is for the public’s good.

F. “Marketing and Management” The Future of Library Services in Greece:

The future holds demand for more and more service. The relationship of available time and money as well as use policy considerations will ultimately either facilitate or restrict the progress of electronic library services. Reduced funding has resulted in the downsizing of staff/services and an emphasis on rationalization and cost-recovery. Our present and mostly, our future requires a responsive, up-to-date library service. The increasing number of cooperative ventures it is time to be driven politically and financially as libraries and educational organizations become more cooperative-conscious. Public Libraries, School Libraries and Academic Libraries will be making agreements among themselves examining to justify their needs and working for the common good. Promoting the usage of the GVRS and its advantages such as saving currency and man-hours, exploitation of the existing material, expansion of the number of users of each library, reduction of the expenses, rational usage of the budget of the libraries, underlines the significance of a good marketing plan.

Library staff, with appropriate training, can enjoy surmounting the challenges, knowing that their work truly makes a difference for remote users, especially students, so let's see its The Role of Librarians:

- Reinforcement in the librarians' educational mission is necessary. Greek National Virtual Desk could use the following online tools and resources:
 - 1) the electronic classroom (virtual classroom through split-screen technology);
 - and 2) the electronic library (catalogue and delivery service).
- Greek librarians should embrace these new opportunities to redefine their roles as teachers, as advocates for information policy development, as organizers of networked resources, as social human beings and take a proactive stance, as eagerly as they welcomed and grasped the technological innovations that so rapidly are changing their libraries

Conclusion:

Public Libraries work together with Museums, Archives and other institutions in local level in order to provide better services to the citizen. This is a major trend in Northern Europe. In Greece, at the same time, there are obvious movements towards a more active role of Public Libraries within the local community. The question is how much can we talk about a real change. In what extent people get what they want from a public library service. More and more the discussion about Libraries moves from the development of the collections to the services offered. All new changes need to be discussed and should work towards the development of human and virtual networks, which apparently will support the developments in local cultural institutions in general. The GVRS is a first step towards a truly virtual

library and extends the access rights of the users of each library. Marketing is one of the primary forces of any successful business and every type of successful library. True marketing is a process which is conducted over and over again, a systematic approach for matching services and products to a customer's wants, needs and desires. Marketing planning gathers information that is infinitely invaluable for creating long term "customer satisfaction". This is what we now need in Greece. Having the best and most appropriate service to satisfy our distant patron of any age, any nationality.

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I. Abstract:

Our paper includes a proposed model related to statistics according to the Greek public and academic libraries. We demonstrate evaluation practices and mainly best-practice and "best-vision" strategy encouraging the improvement in the provision of library services not only in Greece but in a generally implemented framework. Greece is making a great effort to achieve a continuous improvement of the libraries' services. The paper aims to demystify marketing for librarians. Practical solutions are provided on how to implement a marketing strategy, with particular emphasis on the value of using electronic information resources. It also shows the link between promoting library services and raising the profile of the library.

A new model for public library and information services evaluation: an integrated approach - SIADAP^{+B}

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1. Introduction

The origins of SIADAP^{+B} lie in the work reported by Ochôa and Pinto (2004b) that intended to operationalize three evaluation models: Common Assessment Framework (CAF); Balanced Scorecard (BSC) and library standards on performance evaluation, namely ISO 11620. In that context, the research question formulated was: can different categories of indicators (representing qualitative and quantitative variation in conceptions of assessment) be integrated and operationalized during a Public Administration reform?

Since the 1980s, successive Portuguese governments tried to pay close attention to the quality of public services. Today, demands for enhanced services and civil servants' responsibilities are very strong. These demands surpass product/service quality and focus on areas such as management practices, transparency and accountability. In this context, civil servants are the major target for all criticism directed towards Public Administration. There are significant signs that LIS (Library and Information Services), especially in Public Administration, might be closed in a near future due to financial constraints.

In Portugal, LIS performance assessment has been traditionally confined to the production of statistics. Based essentially on input and output measurements, this

is the dominant type of performance information that is produced and used by the LIS sector. As yet, there is not a global movement towards evaluation, a global standard that is accepted and used or generally accepted monitoring mechanisms. There are still many librarians for whom responsibility for managing remains a distant target.

This situation embodies the very definition of our research field. The subjective concept of quality leads to decisions based on perceptions of prestige, ranking of results with the implicit need for impact measurement. The use of evidences will be outlined in the next years within the context of the quality policy itself. The development of SIADAP^{+B} thus emerged from an environmental analysis framed by librarians' perspective and essentially grounded in librarians' experiences. An ongoing research project (2004-) funded by INCITE - the Portuguese Association for Information Management uses several evaluation models in an action research framework. Its main objectives are:

- to enable librarians to develop their evaluation skills and their awareness towards public services demands;
- to enable librarians to benefit from a strategy to improve image;
- to identify learning, support and action-research strategies that will help librarians achieving and monitoring their organisations' outputs and outcomes.

In this paper we argue that these matters should be integrated into a balanced model, based on action research as a form of collaborative, practitioner-based research, which involves participants in the research process as active members reflecting on and contributing with improvement suggestions.

Our action-research is developed in three stages:

1. Definition of methods and data analysis
2. Implementation and test of the model in a library
3. Focus on conceptual findings and conclusions and dissemination of the model among Public Administration libraries and information services.

The present study has been exploratory and is also concerned with two issues. Firstly, librarians need to understand how to deal with citizens' prejudices. In that sense, we will try to demonstrate how SIADAP^{+B} can be used to promote librarians' social image. Secondly, this paper will briefly consider how outcomes may be used to develop evidence-based librarianship among professionals.

2. Theoretical framework: previous literature and relevance of experiences

In the last few years, several authoritative works (Ellis and Norton, 1996; Gray, 1998; DiBella and Nevis, 1998; Osborne and Plastrik, 2000; Neely, 2002; Bevir;

Rhodes and Weller, 2003;) about organizational evaluation have contributed to the growing debates within the information community on the whole process and how it might evolve (Van House, 1987; Ward et. al., 1995; Poll and Boekhorst, 1996; Zweig et al., 1996; Zwart, 1998; Sutter, 2002).

The overall process of quality assessment in public services in Portugal has led to a heterogeneous movement towards modernisation, which included, since 1986, a marked quality strategy. Created in that year, the Administrative Modernisation Secretariat longed for a Public Administration, not powerful and bureaucratic, but centred on customers and capable of satisfying their needs and coping with new challenges. Since then, several initiatives were taken to improve the information and communication flow between citizens and Public Administration and to modernise it. One of those initiatives was the Quality in Public Service Prize, which was launched in 1994, in order to stimulate the development of Quality Programmes. In 2000, during the Portuguese presidency of the EU, the process of constructing a national quality policy entered a new phase: CAF – *Common Assessment Framework* was recommended as the quality management tool European Public Administrations should use.

In general, we can say not only that Portuguese governments had been responsive to the European quality agenda, but also that this movement towards quality had a positive impact on public services, though lower than what was possible and expected.

Specifically in what concerns performance evaluation policy for Portuguese public services, the last Public Administration major reform was produced in 2004. Its seven axes are:

- State organization
- Administrative organization
- Leadership & responsibility
- Merit & qualification
- Value and training
- Culture of service
- e-Government

Closely related to the issue of institutional/staff appraisal is the new model SIADAP - Integrated System of Performance Appraisal in Public Administration. This system has the following objectives (Law n° 10/2004):

- To evaluate the quality of public services and bodies in search of excellence and continuous improvement of citizen focused service delivery;
- To appraise, sharpen accountability and recognise the merit of top managers and staff based on productivity and results achieved;

- To recognise differences between performance levels by fostering a quest for excellence, motivation and recognition of merit.
- To strengthen leadership and management skills in order to enhance efficiency and service quality levels.

3. Quality, performance measurement and LIS in Portugal

In spite of the LIS general picture being quite negative, there is some evidence that libraries in Portugal are developing some strategies towards quality and performance measurement. An analysis of these two areas based on the relevance of experiences shows that school, academic, public and specialised libraries are differently positioned in what concerns quality and performance measurement

		QUALITY	
		Weak relevance	Strong relevance
Performance Measurement	Weak relevance	School libraries	Academic libraries
	Strong relevance	Public libraries	Specialised libraries

Table 1 – Libraries’ experiences on quality and performance measurement

Compared with the situation a decade ago, in some aspects, the movement towards quality seems to be stronger in academic and specialized libraries. In some academic libraries this trend has expanded considerably. This can be explained by the fact that universities are more market-oriented and are trying to be certified by ISO 9000. In comparison, quality in school libraries and public libraries is largely underdeveloped. This is partly due to the existence of a much differentiated knowledge of management techniques within professionals. Public Libraries are very dependent on municipalities’ rules and strategies, which is in turn one of the reasons why, in particular in Portugal, the assessment policy is focused on staff, rather than on the organization in general.

Overall, this short review (arising from data reported by the Observatory on Quality of Knowledge and Information Services¹ studies suggests that, despite the Public Administration reform, libraries in many cases do not yet appear to have substantially embraced quality and performance measurement as their core objective for the next years. The absence of a specific National Policy towards quality management or performance evaluation in the Portuguese LIS sector is a major contributor to this situation, but also to the different development stages in the sub-sectors as mentioned above. Nevertheless, it should be noticed there are

some good isolated experiences. Some case studies debate the focus on performance and results, customer orientation, application of ISO standards on performance evaluation and citizen charters. One of the most debated cases has been the Total Quality Management Program developed by the Library of the Secretary-General of the Ministry of Education (1996-2005).

This experience was launched in 1996 introducing a performance evaluation methodology based on Quality Standards and a Citizens' Charter. In 1998, the Quality in Public Services Prize was awarded to the Library of the Secretary-General of the Ministry of Education for its innovative Quality Programme based on the EFQM model. Until now, this is the only Portuguese library that has won such a prize, being considered a best practice among the knowledge and information community. Since then, this library adopted a strategy focused on the improvement of librarians' social representation and libraries public image. In 2004, it was recognized as a national "good practice" and the library's Director represented Portugal in the 3QC – 3rd Quality Conference for Public Administrators in the EU (15-17 September, Rotterdam, The Netherlands).

According to C. Abbott there are six main reasons for performance evaluation (Abbott, 1994):

- The political imperative
- Accountability to the parent institution
- Performance indicators and quality
- Performance indicators and service level agreements
- Decision support
- Accountability to customers

In the case of the Portuguese LIS sector, the first three reasons, together with a national need for enhancing the social value of LIS professionals, determined the need for applying SIADAP to this particular activity sector. Empirical results also suggest the development of an adapted "version" of SIADAP might be a precious contribute to the enhancement of these professionals' social value. But the success of SIADAP^A^B strongly depends on four principal variables:

- **Role transformation**

LIS professionals must take a more active stand on issues related to performance evaluation and develop as individuals a capacity to create a role transformation in their careers. Librarians' role transformation implies a more experimental approach to issues related to the measurement learning cycles: inter-organizational learning; Inter-professional learning and peers learning. Rather than maintaining traditional roles, we should take the opportunity to become facilitators of organizational evaluation. By assisting this new role, we as librarians

may gain a new role towards social impact, not only to cultivate our motivation but also to encourage future generations to enter this profession.

- **Value added**

It must be based on a dynamic competence scorecard, which is an essential part of a model of performance monitoring. Librarians' performance is as important as libraries' performance. Librarians are archetypal boundary workers who look organizational memory across information sources. The creation of collaborative forms across different competences, and resources management is central to their work. As performance monitoring has taken more economic significance, so innovation and Evidence Based Librarianship has become a priority for LIS professionals. In that sense, value creation will hopefully come by as a result of the *Professional competences image study*, which is being carried in Portugal, since April 2005, by the *Observatory on the Information-Documentation Profession*² (OP I-D)

- **Process redesign and Integration**

These are the other two variables that are important to SIADAP^{+B} success since they are closely related to essence of this integrated model as we will see in next chapter.

4. Building SIADAP^{+B}

SIADAP^{+B}'s central goal is to present the LIS sector with a performance evaluation model that can be used as a strategic tool of organisational quality improvement and social value enhancement of information professionals. In this model of action, information professionals, managers, public services with libraries and customers-citizens are offered important parts.

The construction of a specific evaluation methodology for the Public Administration LIS sector, like any other evaluation methodology, was guided by pragmatism, that is, by the need for respecting the specific birth environment and adapting to the object being evaluated.

Organizational evaluation in the areas of self-assessment (CAF – Common Assessment Framework), strategic evaluation (Balanced Scorecard) and micro-level evaluation (Brown, 1996) provide the theoretical reference framework for the development of an evaluation model for Public Administration LIS.

The essence of strategic learning lies on the construction of an explicit model that can be used to structure performance evaluation (Neely, 2002) according to Tichy and Hornstein's (1980) three stages:

1. Selection of the constituent elements of the model
2. Development of the categories of each element
3. Specification of inter-relations between categories.

4.1 Constituent elements

At the first stage, four evaluation structures (see Fig. 1) were used as essential elements:

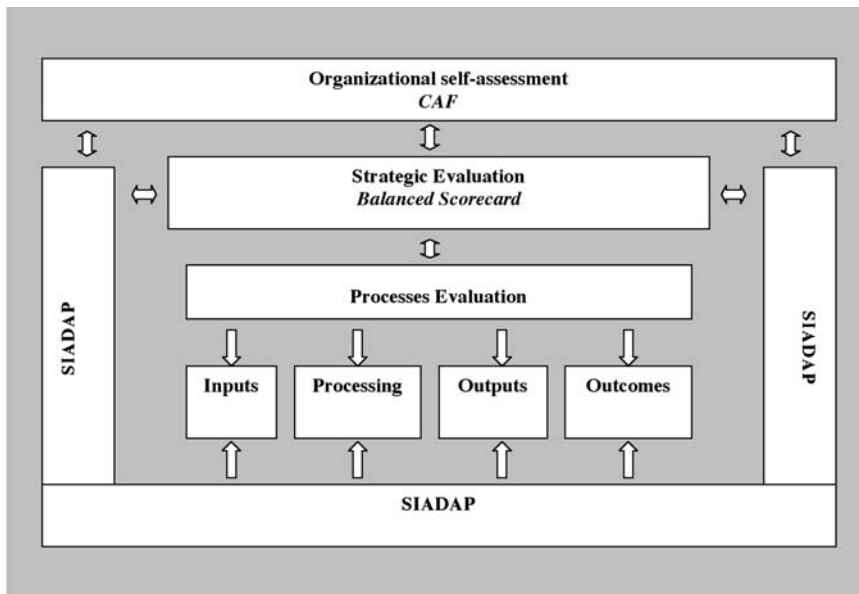


Fig. 1 – Essential elements of the model.

- A. Assessment Structure CAF, aimed at the exhaustive diagnosis of each library's strengths and weaknesses.
- B. Strategic Evaluation Structure Balanced Scorecard, aimed at the creation of a strategic management tool for organisational performance improvement.
- C. Process Evaluation Structure, aimed at micro-level evaluation based on performance indicators that evaluates library's inputs, processing, outputs and outcomes.
- D. SIADAP, aimed at an integrated assessment of Public Administration performance, covering organisational and individual results.

4.2 Development of categories

SIADAP^{+B}'s essential elements were then developed and decomposed in their main categories:

A. Assessment Structure CAF

The Common Assessment Framework (CAF)'s main purposes are to promote the use of quality management techniques among public sector organisations across Europe and to allow the development of benchmarking studies between them. This framework incorporates the principal features of both the EFQM³ model and the Speyer model, but also benefiting from adaptations of EFQM model made by several EU Member States.

CAF provides a self-assessment framework based on nine main aspects of an organisation (see fig. 2): Leadership, Planning and strategy, Human Resource Management, Partnerships and resources, Process and change management, People results, Customers/citizen oriented results, Society results and Key performance results (CAF, 2002).

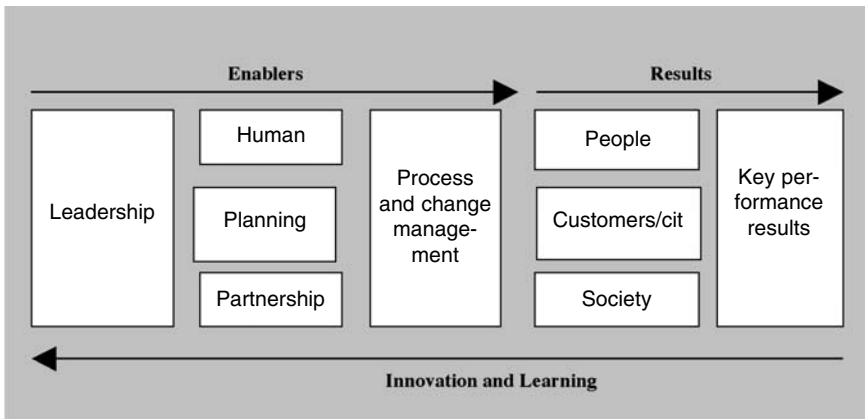


Fig. 2 – CAF (2002)

B. Strategic Evaluation Structure Balance Scorecard

The inadequacy of classic methods used to evaluate private sector corporations evaluation to the needs of the emergent Knowledge Society led to the development of innovative assessment methodologies like Robert Kaplan and David Norton's Balanced Scorecard (BSC). The origins of this strategic management tool can be traced back to the 1990 study *Measuring performance in the organization of the future*. This study was resumed in an article published in 1992 in the Harvard Business Review and later developed in Kaplan and Norton's book *The balanced scorecard: translating strategy into action* (1996). Since then, BSC has been used and adapted by a growing number of enterprises, but also by non-profit organisations.

BSC promotes the establishment of tangible objectives and measures that relates to an organisation’s mission, vision and strategy, placing it on course to future performance. BSC focuses on four critical success indicators: customer service, financial accountability, internal processes and learning and growth.

Skandia, one of the largest Scandinavian insurance companies, developed an adapted version of Kaplan and Norton’s BSC, which has been highly appreciated all over the world mainly due to its high effectiveness – the Intellectual Capital Navigator. This management model is based on five main focuses: Financial focus (representing the past), Consumer focus, Human focus and Process focus (representing the present) and Renewal and development focus (representing the future) (Rezende, 2003). The strategic evaluation structure that supports the construction of the integrated model SIADAP+B is an adaptation of Skandia’s model which also presents five focuses (see fig. 3): Results focus, Customers-citizen and society focus, Organisational behaviour focus, Internal process focus and Renewal and development focus.

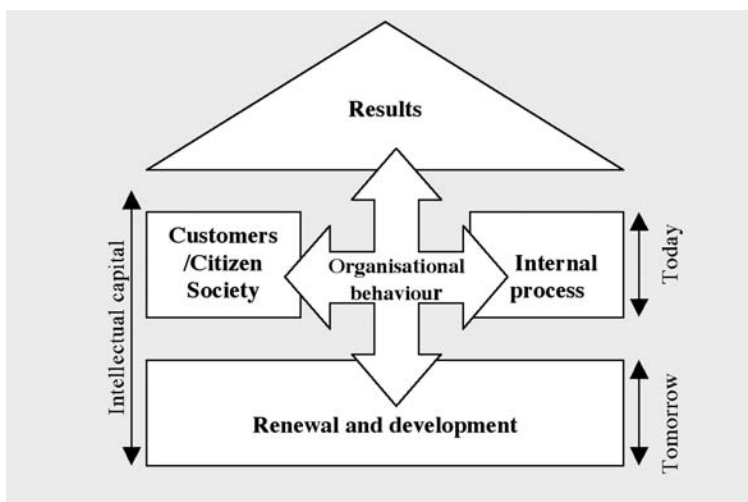


Fig. 3– Balanced Scorecard Structure (adap. from Skandia’s Intellectual Navigator In Rezende, 2003, p. 165)

C. Process Evaluation Structure

Process evaluation follows the processing metric structure defined by Brown (1996). In Cameron’s typology, this approach to library performance evaluation fits into the internal processes model, which emphasises the organisation’s

internal communications systems and the efficiency with which it transforms inputs in outputs (1986, quoted by Cullen, 1998).

The Process Evaluation Structure is formed by five categories (see fig. 4):

- Inputs
- Processing system
- Outputs
- Outcomes
- Objectives (which link organisational and individual performance to the strategic focus).

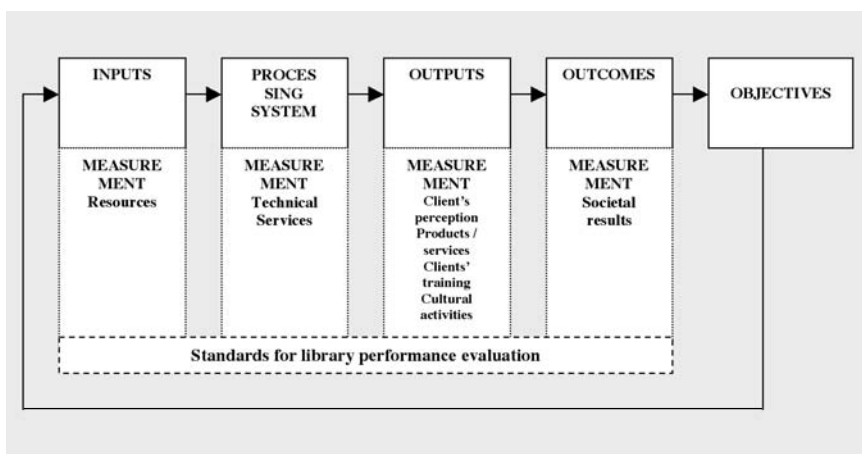


Fig. 4 – Process Evaluation Structure.

In each category, specific performance measurements are established (and re-established) according to the objectives that were set. These measures and indicators should also be guided by the (inter)national standards on library performance evaluation and measurement. In SIADAP+B, the thirty-four performance indicators recommended by ISO 11620: 1998 and ISO 11620:1998/Amd.1.2003 plus the fifteen indicators for electronic library services (ISO/TC 20983) are framed into four categories:

- User perception
- Public services
- Technical services
- User services

D. SIADAP – Integrated System for Performance Appraisal in Public Administration

This system is aimed at the integrated development of an overall model for performance assessment of Portuguese Public Administration capable of functioning as a strategic tool to gear to changes, professional motivation and improvement in the sector (Law n. ° 10/2004).

Among SIADAP's governing principles, one can find the outcome-based approach, the universality of its applicability, the accountability and development and the recognition and motivation.

SIADAP is integrated into the regular annual management cycle within every Public Administration service and body. It includes five building blocks: (1) Setting out an Action Plan for the following year (with strategic objectives); (2) Setting out objectives to be achieved by each organisational unit the following year; (3) Setting out objectives for each worker and/or team for the following year; (4) Reporting activities; (5) Evaluating performances (see fig. 5).

4.3 Inter-relations between categories

In SIADAP^{+B}, each category is part of chain of measurement relations directed towards the strategic focus. As pictured in fig. 6, the points of contact are established through four levels of integration. The numbered circles placed inside each category show how components relate to each other in this integrated model.

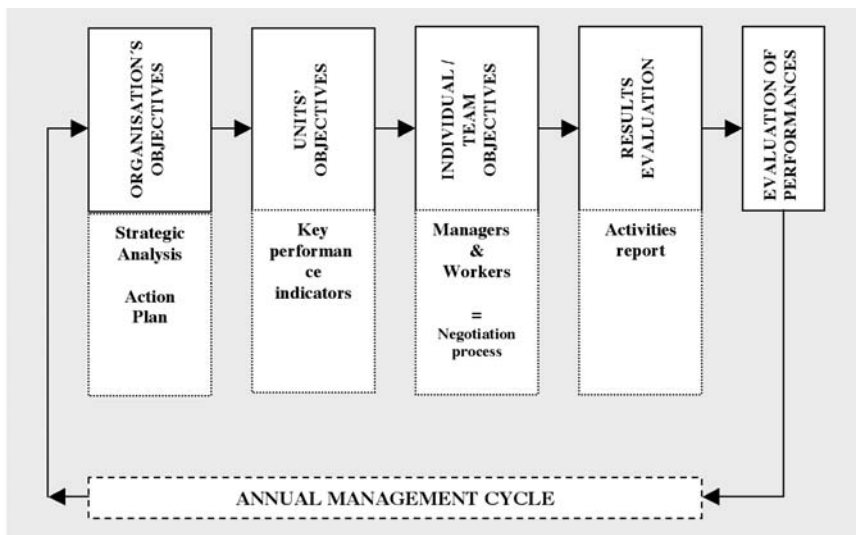


Fig. 5 – SIADAP - Integrated System of Performance Assessment in Public Administration.

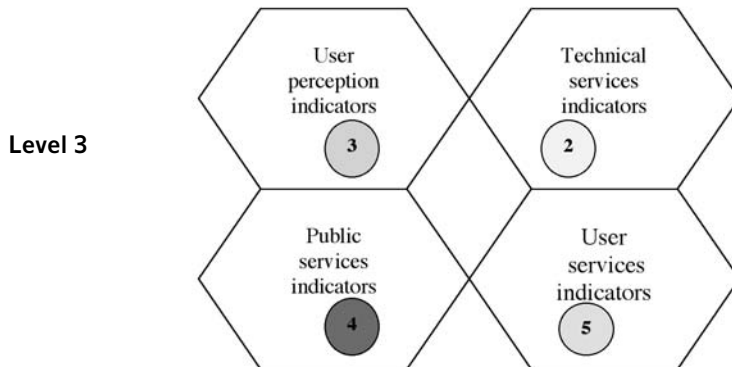
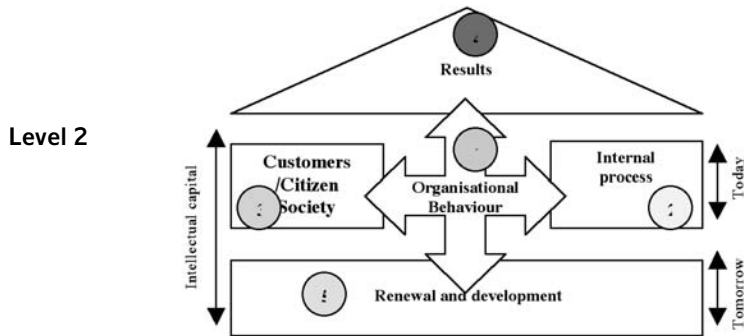
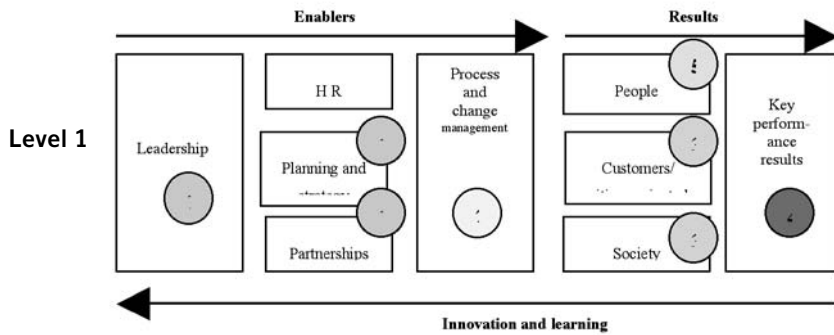


Fig. 6– Inter-relations between the categories of SIADAP+B model

In fact, the application in a library of CAF's nine self-assessment criterions - Leadership, Planning and strategy, Human Resource Management, Partnerships and resources, Process and change management, People results, Customers/citizen oriented results, Society results and Key performance results – can be assisted by the five evaluation perspectives proposed by SIADAP^{+B}'s Balanced Scorecard. For instance, BSC's Organisational behaviour focus relates to CAF's Leadership, Planning and strategy and Partnerships and resources assessment criterions.

Though the implementation of the integrated model SIADAP^{+B} can be done in diverse ways, there is a mandatory pre-requisite: it has to be customized, that is, adapted to the foster organisation. The successful implementation of this model depends, therefore, on its ability to reflect the library and parent organisation's strategies and adapt to the collective needs and expectations. In this process, strategic planning must be an organisational practice; the organisational vision (strategic focus) is an essential piece in this model, since it acts as a continuous reference for the alignment of strategic objectives, communication, operational decisions and training.

It is important to use SIADAP^{+B} as an experience of competences development within the management cycle. Kolb (1984) presents an experiential learning model with interdisciplinary influences based on individual learning experiences. Four learning elements are presented: concrete experience (level of involvement); reflexive observation (systematic reflection upon self-experience and learning); abstract conceptualization (reflections related to knowledge and experiences) and active experimentation (development of experiences and exploration of learning areas). Self-evaluation is an individual learning experience with relevance to organizational learning; as people reflect on their performance from open experimentation, they are encouraged to learn in this way. The added value of this approach to reflection-performance evaluation has also revealed the importance of “double-loop learning” (Argyris and Schon, 1978) when actions and intentions can be interpreted through experiences. Learn with practice is a context dependent professional situation that must be incorporated in this model.

There is growing evidence to suggest that research skills are crucial to maintaining the impact of performance evaluation: to improve performance outcomes (individual and organizational), librarians' development should be aimed at fostering an evidence-based librarianship approach. The results obtained can be interpreted in various ways: reflexive practice and action learning, team learning and professional learning and performance.

5. Conclusions

To summarize, this reflection upon emerging needs to evaluate public services reveals a new understanding of a government model – SIADAP – going from an assessment of objectives to a wider definition that can be better captured by a theory driven perspective based on action-research. Under this interpretation, SIADAP^B is concerned with linking theory (learning, competences, assessment) processes of work and outcomes through an exploration of several models. It is important that different tools and techniques in quality management and performance evaluation become more integrated so that they serve each other. The evaluation design described here reflects much of the latest influences in multi-method and multi-level collaborations.

A more informed perspective on the priority issues for LIS in Portugal has emerged with this project. From the first results generated it is apparent that the priority for further investigation and model improvement should be in the following areas:

- Projects for indicators, statistics and performance targets;
- Improvement in service provision;
- Development of service profile based on staff competencies and quality services
- Levels of organizational learning

Every model will fail to produce their potential benefits unless it is actively led and supported by individuals who believe that they can and should make a positive difference to stakeholders. LIS professionals need the “three Ts”:

- Time
- Trust
- Tenacity

Further development of this work will be on the direction of increasing the marketing role of the profession as an innovative profession that is prepared to take the risk of making changes in library management and become a “good practice” in public services. This strategy of visibility (LIS professional competences-driven and LIS professional social value-driven) should be linked to Evidence Based Librarianship. In a competitive market place, it is now the moment to solve some old dilemmas between practicing and research.

Although this communication was not able to address this in further detail, it is our hope that the issues discussed above will provide a framework for such a discussion.

Notes

- 1) The Observatory on Quality of Knowledge and Information Services (OQIKS) was launched on the 25th October 2001 based on a knowledge partnership between two services of the Portuguese central Public Administration: Inofor – Institute for Innovation in Vocational Training and the Secretary-General of the Ministry of Education. This innovative experience was presented in several scientific events, like for instance the 68th IFLA General Conference and Council (Glasgow, 2002) and the NORD I&D 2004 (Aalborg, 2004) (Ochôa e Pinto, 2004; Ochôa e Pinto, 2004a).
- 2) INCITE – The Portuguese Association for Information Management is one of the members of the OP I-D, a project that aggregates four Portuguese information professional associations and tries to respond to the tendency to focus on professional performance and value.
- 3) European Foundation for Quality Management.

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Abstract

The aim of this paper is to present the model developed specifically for the evaluation of Portuguese public library and information services as a result of a research project carried out by INCITE - The Portuguese Association for Information Management (2004). The model is based on four action-oriented pillars:

- Common Assessment Framework (CAF) – the self-evaluation framework recommended for European Public Administration Services;
- Balanced Scorecard – Kaplan and Norton’s strategic tool for organizational management and performance improvement;
- Library standards on performance measures and indicators (ISO 2789, ISO 11620 and ISO/TR 20983);
- The Portuguese system for evaluating Public Administration organizational and individual performance – Sistema Integrado de Avaliação de Desempenho da Administração Pública – SIADAP.

The balanced integration of all these components focused on a library perspective is an innovative tool, which can push librarians towards a new social impact, since it is the first professional group to have a self-evaluation performance tailored-made tool.

The model is described and the integration links are mapped in detail.

The dissemination of SIADAP+B among the library and information community, together with a (inter)national growing tendency towards quality assessment led to several marketing initiatives within libraries. These initiatives and projects carried out by INCITE or, individually, by INCITE members are analysed:

Finally, after reflecting on the difficulties of changing the traditional performance evaluation behaviour of librarians, the advantages of using an integrated model for performance evaluation are emphasized, especially in terms of INCITE's marketing policy.

Developing a culture of evidence based practice within the library and information profession: the impact of library science education. A teaching and learning model from the Queensland University of Technology

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Introduction

Increasingly, the library and information practitioner is being encouraged to engage in research in order to “create new knowledge and thereby contribute to the growth of LIS as a profession or discipline” (Juznic & Urbanija, 2003, p.325). Crumley and Koufogiannakis (2002) propose that “when a librarian encounters a workplace problem or question to which there is no answer, conducting research to answer that question benefits the entire profession” (p.112). In 2001 the Centre for Information Research was commissioned by the Chartered Institute of Library and Information Professionals (CILIP) to conduct an examination into the research landscape for library and information science. The examination concluded that research is “important for the LIS domain in a number of ways” (McNicol & Nankivell, 2001, p.77). At the professional level, research can inform practice, assist in the future planning of the profession, and raise the profile of both the discipline and the library and information service itself. At the personal level research can “broaden horizons and offer individuals development opportunities” (McNicol & Nankivell, 2001, p.77). However it was noted that “work is needed to stimulate greater interest in, and respect for, research within the LIS community” (McNicol & Nankivell, 2001, p.82). It was recommended that “research should be promoted as a valuable professional activity for practitioners to engage in” (McNicol & Nankivell, 2001, p.82). The study concluded, however, that for this

to occur, there must be an “obligation on the part of library schools, employers and professional bodies to ensure the practitioners have the necessary skills to be able to conduct research effectively” (McNicol & Nankivell, 2001, p.82).

This paper will consider the role of library education in fostering a research culture within the profession. More specifically, the paper will discuss the teaching and learning model developed at the Queensland University of Technology (QUT) to develop student awareness, understanding and skills in evidence based information practice. The paper is divided into two parts. The first part considers the role of evidence based practice within the library and information profession. A brief review of key literature in the area is provided. The second part discusses the teaching and learning model developed by QUT to embed the skills, knowledge and understanding of evidence based practice in the library curriculum. The paper concludes by considering the role library education can, and should, continue to play to establish an evidence based culture within the profession. The paper also considers the significant contribution to be made by the individual practitioner, the employer and the professional association in this context. The paper aims to open discussion on the future (if any!) of the library and information profession without evidence based practice, and the consequent implications for the skills and knowledge needed by the evidence based information professional.

Evidence Based Practice and the Library and Information Profession: A Brief Review of the Literature

Evidence Based Practice and Evidence Based Librarianship: A Few Definitions

Evidence based practice has progressively become a topic of discussion within the library and information literature. Evidence based practice is founded in Evidence Based Medicine, which has been described as “an approach to decision making in which the clinician uses the best evidence available in consultation with a patient to decide upon the option which suits the patient best” (Gray, 2001, p.17). More simply stated, evidence based practice is based on the concept that “practice should be based on up-to-date, valid and reliable research” (Brice & Hill, 2004, p.13).

In her inaugural speech in 1997, Rachael Anderson, then President of the Medical Library Association (MLA), suggested that librarians needed to develop their own version of evidence based practice (Anderson, 1998) In that same year the term evidence based librarianship was first introduced into the broader library and information profession’s vocabulary by Jonathan Eldredge (1997).

The first attempt to define evidence based librarianship was provided by Andrew Booth. In 2000 he adapted a pre-existing definition of evidence based practice. Booth notes that the definition has the “advantage of being coined by a librarian, Anne McKibbon from McMaster University” (Booth & Brice, 2004, p.7).

Evidence based librarianship (EBL) is an approach to information science that promotes the collection, interpretation, and integration of valid, important and applicable user reported, librarian observed, and research derived evidence. The best available evidence moderated by user needs and preferences is applied to improve the quality of professional judgement .
(Cited in Booth, 2002, p.53)

In 2002 Jonathan Eldredge offered his definition of EBL:

Evidence based practice (EBL) seeks to improve library practice by utilising the best available evidence in conjunction with a pragmatic perspective developed from working experiences in librarianship. The best available evidence might be produced from either quantitative or qualitative research designs, depending upon the EBL question posed, although EBL encourages using more rigorous forms over less rigorous forms of evidence when making decisions.
(Eldredge, 2002, p.72)

Crumley and Koufogiannakis, noting that the current definitions of EBL were overly theoretical, offered a “practical definition for everyday referral” (p.62). Evidence based librarianship was defined as

a means to improve the profession of librarianship by asking questions as well as finding, critically appraising and incorporating research evidence from library science (and other disciplines) into daily practice. It also involves encouraging librarians to conduct high quality qualitative and quantitative research.
(Crumley and Koufogiannakis, 2002, p.62)

This last definition places a greater emphasis on “the improvement of professional practice together with the addition of the librarian as practitioner-researcher.”
(Booth, 2002, p.54)

In reviewing existing definitions of Evidence Based Librarianship, Booth (2002) compiled the following list of ‘consensually based’ defining characteristics of EBL:

- A context of day to day decision making
- An emphasis on improving the quality of the professional practice
- A pragmatic focus on the ‘best available evidence’
- Incorporation of the user perspective
- Acceptance of a broad range of quantitative and qualitative designs
- Access, either first hand or second hand to the (process of) evidence based practice and its products. (Booth, 2002, p.54).

Booth also notes one significant omission from the list, and by consequence, from existing definitions of EBL: “a preoccupation with obtaining best value services for available resources” (Booth, 2002, p.54). Booth argues that this characteristic must be included as recognition of the “pragmatic real world thrust of EBL, coupled with its emphasis on decision making, requires that all decisions be taken in the context of finite resources” (Booth, 2002, p.54).

Evidence Based Librarianship or Evidence Based Information Practice?

In 2003 Booth challenged why proponents from within the library profession were so enthusiastic in adopting the term evidence based librarianship. Booth and Brice (2004) cite four sound reasons for the adoption of the preferred term evidence based information practice (EBIP):

- “The label ‘evidence based librarianship’ leads, as Crumley and Koufogiannakis (2002) recognise, to the inevitable confusion between librarians supporting evidence based practice and librarians practising evidence based practice” (Booth & Brice, 2004, p.6).
- The term ‘evidence based information practice’ places a stronger link between ‘evidence based practice’ which will allow the library and information profession to tap into “the emphasis on multidisciplinary” (Booth, 2002, p.58) inherent in evidence based practice. The library and information profession will benefit from the “kinship with related [evidence based] professions such as teaching and social work” (Booth, 2002, p.58) and consequently will not miss out on new and interesting developments in other evidence based fields such as information systems which is closely related to those of evidence based librarianship (Booth & Brice, 2004, p.7).
- ‘Evidence based information practice’ acknowledges the wider context of information science (Booth & Brice, 2004, p.8).
- ‘Evidence based information practice’ places the focus on the “commonality of issues and methods within the domain of information practice with those that have emerged from the origins of the generic paradigm. Evidence based information practice is evidence based practice within information as both its subject and its object” (Booth & Brice, 2004, p.8).

Ultimately however, Booth (2003) anticipates that even the term “evidence based information practice will...write itself out of existence” (p.70). He proposes that:

the long term future of evidence based information practice probably lies not in a single minded focus on research-derived evidence but in a more encompassing approach that embodies reflective practice. (Booth, 2003, p.70)

Booth indicates that the library and information professional of the future will be a reflective practitioner (with reference to the work by Schön,1991) “with the ability to critically analyse [and] make informed judgements” (Booth, 2003, p.70) by drawing on a range of catalysts, with research evidence representing one opportunity. Booth suggests “ultimately evidence based practice will contribute to a tool box from which the reflective practitioner will occasionally draw” (Booth, 2003, p.70).

This perception of the future is also favoured by Todd (2002):

a profession without reflective practitioners [*italics added*] willing to learn about the advances in research in the field is a blinkered profession, one that is disconnected from best practice and best thinking, and one which, by default, often resorts to advocacy and position as a bid for survival (p.4).

Why is Evidence Based Information Practice Important?

The arguments for evidence based information practice have been well discussed within the LIS literature. In 2001, Williamson, Burstein and McKemish proposed that “research can play a very valuable role in the practice of information professionals” (p.12). Six key reasons were identified to underscore the value of research to professional practice:

1. To assist in understanding the problems and issues which arise in the workplace
2. To add to knowledge in the field and/or provide solutions to problems
3. To maintain dynamic and appropriate services
4. To meet requirements of accountability – research is important in the age of accountability as it can assist in policy formulation and provide data to justify present funding or increased funding
5. To maintain and improve professional status
6. To provide a body of research findings and theory to inform practitioners (Williamson, Burstein & McKemish, 2001, p.12).

Juznic and Urbanija (2003) observe that “research...[helps] LIS professionals to learn more about their work, perform better and offer a higher level of service to their clientele and users... research findings provide further motivation, guidance, and input to the successful services” (p.325). This idea is supported by Lowe (cited in Williamson et al, 2001) who contends that “research enables professionals to add value to their work and work practices” (p.12). Lowe extends the concept further by proposing that the use of research in practice makes a clear distinction between “professionals who maintain the status quo without question and those who strive to develop their work practices through continual evaluation and investigation” (cited in Williamson et al, 2001, p.12). Harvey (2001) builds upon

this idea by arguing that “research and professional practice are inextricably linked” (p.xiii) and as such “research skills are a prerequisite [italics added] for those who want to work successfully in information environments” (p.xiii). He postulates that research skills represent an “essential set of tools which enable information workers to become information professionals” (p.xiii). According to Harvey:

The work of information professionals is being transformed. The information services we offer, the information products we develop and sell, the information systems we design and implement, are undergoing rapid change. So, too, is the society in which we operate. We have a continual need to determine what is happening, how it is changing, how it will affect our places of work, how it will alter the services we offer. Change and its ramifications is the most important reason why research is necessary, and why it is here to stay. If you don't know something about the tools of research and about how to use these tools, then you cannot be an effective information professional.

(Harvey, 2001, p.xii)

In 2001 the Special Libraries Association (SLA) released its revised Research Statement in which the role of evidence based practice, within current library and information work, is strongly advocated. In a recent commentary on the research statement, the SLA Research Committee and Joanne Gard Marshall (2003) suggest that, as the health and future of any profession depends on the members' ability to evaluate both themselves and their professional practice, the development of strategies to undertake evidence based practice may well be a valuable opportunity to improve and refine our own professional activities.

In further support of these views, the SLA research statement itself notes that

These are challenging times for professional in all areas of practice. The consumer movement and the wide availability of information, including information that was formerly only accessible to professionals themselves, have led to a demand for increased professional competence and accountability. It is time for special librarians to recognize the potential value of formal and informal research in our field as the basis for evidence based practice. In the long term, such a knowledge base and its effective application will set information and library professionals apart in an increasingly competitive world of information service providers.

(SLA Research Committee & Gard Marshall, 2003, p.43)

Juznic and Urbanija (2003) stress the importance of research, particularly in our own discipline: “Research is needed to create new knowledge and thereby contribute to the growth of LIS as a profession or discipline. If research is absent, non existent or even scarce, there is no profession, but only an occupation grounded in tech-

niques, routine and common sense” (p.325). On a more pragmatic level the emerging literature exploring evidence based librarianship proposes that library and information professionals should ‘practice what they preach’. Crumley and Koufogiannakis (2002) observed that “in our profession we help our patrons make decisions by leading them to research evidence. It is vital that we follow the same model: we should consult our own literature when we have questions about best practices in our field” (2002, p.112). Ritchie (1999) also noted that, given our role as managers of the literature of research, library and information professionals are uniquely placed “to model the principles of evidence based practice, not only as they apply to other disciplines which we serve, but also as they apply to our own professional practice...’if you are not modelling what you are teaching you are teaching something else” (Ritchie, 1999, para. 6).

Evidence Based Information Practice: the Challenge for Library and Information Science Education

Crumley and Koufogiannakis (2002) observed that “fostering an appreciation of research and how it relates to the profession is necessary for librarianship to grow and become more evidence based” (p.69). They conclude that “teaching research skills to all library school students is essential for the growth of EBL within the entire profession” (p.69) and as such, they challenge current library education to “play a major role in encouraging new librarians to take an evidence based approach to their profession” (p.69).

A similar conclusion is reached in the 2004 publication on evidence based practice for information professionals by Booth and Brice. In this work the authors argue that “getting research into practice...requires relevant skills to be built into professional development and educational initiatives” (Brice, Booth, Crumley, Koufogiannakis, Eldredge, 2004, p.282). They propose that “lobbying educational institutions to increase research and appraisal skills teaching in the curriculum” (Brice et al, 2004, p.289) is one of several short term priorities required to “sustain momentum and engage new activists” (Brice et al, 2004, p.287) to the evidence based phenomenon.

At the 2nd International Evidence Based Librarianship Conference held in 2003, Schrader commented on the incongruity between the prominence of research in the ALA Standards for Accreditation of Masters programs in Library and Information Studies and the reality of current library education in the US. Schrader made the following lament: “Why research training is not a mandatory component of every accredited program remains a mystery to me, and why deficient programs are able to get and continue their accredited status is an even bigger mystery” (2003, p.171). These concerns may indeed echo across the educational

institutions in other countries; both LIS educators and the accrediting bodies should heed the need to take action. The immediate and pressing challenge for library and information science education is to take an active role in fostering the development of the new evidence based information professional, and consequently to more effectively achieve the goal of providing industry with information professionals who are well equipped and able to function in the ever-changing information environment of the twenty first century.

Meeting the Evidence Based Information Practice Challenge: Library Education at the Queensland University of Technology

The Master of Information Management

The Master of Information Management (MIM) is a course offered by the School of Information Systems within the Faculty of Information Technology. The Masters program was introduced in 2005 with an initial cohort of 49 students enrolled in the course, 32 part-time and 17 full-time. The course builds on a Graduate Diploma in Library and Information Studies (GDLIS), with the curriculum informed by teaching and learning research activities to identify the core discipline knowledge and generic capabilities required by LIS professionals (Partridge & Hallam, 2004). The Masters course, comprising ten core academic units and two elective units, is completed in one and a half years full-time or three years part-time. Table 1 provides a description of the ten core units. The MIM seeks to “provide graduates with the skills to find employment in a range of diverse information roles” (QUT, 2005). On completion of the course, students will be eligible for professional membership of the Australian Library and Information Association (ALIA).

While the MIM is an example of a tertiary education course that aims to prepare graduates for employment, the academic staff are mindful of the enormous range of employment opportunities available to ‘information professionals’. The landscape is extensive, from the broad levels of academic libraries, public libraries, State and National libraries, through to the narrower levels of special libraries and information centres, such as law libraries, health and medical centres, music libraries etc. Opportunities also exist beyond this more traditional library context, with career avenues available within knowledge management, records management, Internet and intranet development and so on.

What Skills and Knowledge are Needed for Evidence Based Information Practice?

It would be valuable to have a clear understanding of the skills, knowledge and attitudes required for evidence based practice within the profession which could serve to inform the development of the LIS curriculum as a vehicle for fostering the advancement of evidence based information practice. However, at present there

Unit Title	Unit Synopsis
ITN200 Database Systems	The unit introduces students to the fundamental information concepts: rules, facts, and their embodiment in database systems. This unit also helps to develop skills in independent work, problem solving and critical thinking.
ITN201 Enterprise Architecture	This unit introduces students to the context, value and need for enterprise architecture within an organisation. The unit also helps to develop skills in creative and critical thinking, oral and written communication team work and the ability to work independently.
ITN273 Information Retrieval	This unit introduces students to the ever changing information environment. Students develop skills in identifying, accessing, evaluating and retrieving information resources to meet specific information needs. This unit also helps to develop skills in reflective practice, evaluation, oral and written communication as well as the ability to work successful independently.
ITN274 Management Issues for Information Professionals	The overall aim in this unit is to identify key issues and management strategies within libraries and other information agencies. The unit also helps to develop skills in critical thinking, evaluation and written communication.
ITN275 Information Organisation	This unit provides an introduction to the rules and standards of bibliographic description, and shows how they are applied to description and classification for different types of user needs. The unit also helps to develop skills in reflection, creative thinking and evaluation, project management and oral and written communication.
ITN276 Information Services	This unit seeks to develop students' understanding of the key issues involved in developing, managing and evaluating a contemporary and innovative information service. The unit further seeks to develop oral and written communication skills, critical thinking, teamwork skills, and project management ability.
ITN266 Principles of Information Management	In this unit students focus on the management of information as an enterprise resource. The unit also helps to develop critical thinking, evaluation and problem solving skills.
ITN278 Web Content Management	In this unit students aim to develop an understanding of the principles underpinning web content management including, interface design and presentation issues and web information management. The unit also helps develop evaluation, critical thinking and problems solving skills.
ITN279 Information Literacy Instruction	This unit provides the opportunity for students to develop both a theoretical and practical understanding of information literacy and how to develop the information literacy of diverse clients. The unit also helps to develop skills in oral and written communication and critical thinking.
ITN280 Professional Practice	This unit provides students with the opportunity to spend time in the professional working environment via fieldwork placements, as well as to explore many of the issues that have an impact upon professionals working in information agencies. Students are encouraged to reflect on their own knowledge, skills, and abilities gained throughout the course of study, through the completion of a professional portfolio.

Table 1: The Master in Information Management Core Curriculum

exists no detailed listing or discussion on this issue. Booth and Brice recently stated that “specifying generic skills required for the development of EBIP at all levels (individual, organizational and policy), and allowing for flexibility in augmenting these with additional specialist skills, would be a major step forward, both in formal and in continuing education” (2004, p.285). Ongoing dialogue within the profession has clearly established that “research can and does play a vital role in professional practice” (Harvey, 2001, p.viii), indeed, “it is more important than ever to build our knowledge base and to use evaluation research methods to constantly monitor and improve the quality of the services provided” (SLA Research Committee & Gard Marshall, 2003, p.40). The current paper endeavours to contribute to the current professional debate by providing one perspective on the skills, knowledge and attitudes required by an evidence based library and information professional, and by explaining how the LIS curriculum can be designed and delivered to allow future information professionals to develop in these areas.

One of the key objectives at QUT is to develop new graduates who are enthusiastic and confident about their new profession – a dynamic and exciting world of library and information studies. Aware of its role to industry as a supplier of employees to the marketplace, QUT undertakes an ongoing review process for the library science curriculum to ensure it continues to embrace the needs of current industry practice. The world of libraries and information agencies in the 21st century is highly dynamic; while some traditional elements of librarianship remain important, the desired skills set for information professionals is rapidly expanding into new areas of knowledge. As the new LIS professional will be employed in a rapidly changing, information intensive working environment, he or she will need to not only have the ability to combine theoretical discipline knowledge with the practical application of this knowledge in a range of different situations, including situations in an unknown future, but to also embody a range of “holistic capabilities which represent the links between discipline knowledge and professionals skills” (Bowden & Marton, 1998, p.12). In terms of curriculum content, this encompasses the need to acquire sound disciplinary knowledge as well as to develop the personal attributes and attitudes, commonly referred to as ‘generic capabilities’, which are needed for a successful career as an LIS professional. At the highest level, QUT LIS educators believe in the need for a holistic approach to student learning where the personal and professional dimensions are intertwined. The authors of the current paper propose that is it this holistic focus in LIS education which will help twenty first century library and information professional to develop into, as proposed by Booth, a ‘reflective practitioner’ who has the ability to “critically analyse [and] make informed judgements” (Booth, 2003, p.70) drawing on a ‘toolbox’ of skill and knowledge which will include evidence based practice.

The focus on generic capabilities within LIS education is not new. The Reading the Future for Library and Information Services Education and Practice Conference held in Melbourne in 1996 made several important recommendations regarding LIS education, including incorporating generic transferable skills into the LIS curriculum (Todd, 1997). The importance of this point has been emphasised by ongoing dialogue and research throughout the world and by the importance given by professional bodies such as the International Federation of Library Associations and Institutions (IFLA), the American Library Association (ALA) and the Australian Library and Information Association (ALIA) to continuing education programs that not only incorporate discipline specific knowledge but also generic capabilities. As a case in point the Professional Development (PD) Program managed by ALIA provides a means by which members can document and monitor their professional growth. “The dynamic environment of the library and information sector dictates the need for library and information professionals to remain flexible and adaptable to change... Lifelong learning extends and develops the knowledge, skills and competencies of practitioners. It also enables them to prepare for their work more effectively, to broaden their career and to undertake new tasks” (ALIA, 1998, para 2-3). Significantly the distinction is made in the program between the necessity of developing skills in both the “LIS Specific Areas” and “Generic Areas”. The latter refers to skills such as team membership, effective communication and critical and evaluative thinking. It is becoming apparent that library educators must not lose sight of the need for LIS courses to “equip graduates with a range of enterprise skills, transferable skills, including interpersonal communication, teamwork, report writing skills, numeracy, computer literacy, time management and so on” (Day, 1997). Generic capabilities must be considered in the current climate of change within the LIS profession, and by consequence, in LIS education.

From 2002 to 2004 QUT funded a research project aimed at identifying the key knowledge and skills required by the library and information professional of the twenty-first century (Partridge & Hallam, 2004). Participants in the study included library and information professionals, educators and students from South East Queensland. Focus groups were used for data collection with 98 participants taking part in 11 sessions. The focus group discussions resulted in the identification of 14 fields of discipline knowledge and 10 generic capabilities essential for the modern day library and information professional. A breakdown of the skills and knowledge regarded as essential to the library and information professional in these areas is provided in Tables 2 and 3. Full details on the research project can be found in Partridge & Hallam (2004).

In short, the current paper supports the view proposed by Booth (2003) by advocating that, to develop the ‘new evidence based information professional’,

LIS education must focus on fostering the development of ‘reflective practitioners’ who are not only discipline savvy but also highly skilled in the area of generic capabilities.

	Fields of discipline knowledge	Scope of field
1	Information and society	The role of information in society as a social, cultural and economic motor.
2	Ethics & legal Responsibility	The study of : <ul style="list-style-type: none"> • ethical considerations that arise in the storage, processing, retrieval and use of information and information systems • standards of conduct for information professionals in the performance of their duties • legal issues that apply in relation to the storage, processing, retrieval and use of information and information systems.
3	Management	The study of management theories and the basic principles of management as they apply to libraries and information centres.
4	Information organisation	The study of the description and organisation of information resources to facilitate information access and retrieval
5	Information services	The study of the design and delivery of relevant and efficient information services.
6	Collection management & development	The study of the activities associated with the development and management of, and access to, library and information resources.
7	Information resources and retrieval	The study of the theory and practice of reference and information services.
8	Information literacy instruction	The study of information use theory, contemporary teaching theory and instructional design.
9	Information management	The study of: <ul style="list-style-type: none"> • of management principles to the acquisition, organisation, control, dissemination and use of information relevant to the effective operation of organisations. • knowledge within the context of an organisation, including information and knowledge creation, codification, sharing and learning.
10	Information systems for library and information professionals	The study of the application of computer-based systems in libraries and information centres.
11	Web content management	The study of the design and management of internet and intranet sites.
12	Career planning skills	An understanding of the skills essential for successful career planning including employment seeking strategies and career planning.
13	Records management and archives	The study of the application of management principles to the control of an organisation’s records. The study of the management and control of records that are judged to have permanent value.
14	Research	The generation of knowledge through the ability to systematically gather and analyse data to advance library and information science theory and its application to the provision of information services.

Table 2: The LIS discipline knowledge required by the Library and Information Professional of the Twenty First Century.

Evidence Based Information Practice and LIS Education: The Issues

Developing an LIS curriculum relevant to the ever changing needs of the twenty first century is inevitably challenging. Three key issues must be considered when embedding the skills, knowledge and attitudes essential for evidence based practice into library education: the lack of homogeneity within the student cohort, the diversity

	Generic Capability	<i>Description</i>
1	Information Literacy	Information Literacy is the ability to recognize when information is needed and being able to locate, evaluate and use effectively the needed information.
2	Lifelong Learning	Lifelong Learning is the ability to learn how to learn in all facets of life (i.e. professional, personal and educational).
3	Teamwork	Teamwork is the ability to work effectively with others in a group with the view to achieving defined goals. Two distinct roles necessary for teamwork are the team member and the team leader. A team member makes a productive contribution to the collaborative effort of the group by participating in the pursuit of group goals under the guidance of the team leader. The team leader makes a productive contribution to the collaborative efforts of the group by providing guidance to ensure desired goals are met.
4	Communication	Communication is the ability to exchange feelings, ideas and information with others in an appropriate manner. Communication consists of the two key aspects of oral and written skills. Oral communication involves using the human voice to effectively articulate a message to an intended audience. Written communication involves using text or graphics to effectively transmit a message to an intended audience.
5	Ethics and Social Responsibility	Ethics and Social Responsibility relates to an awareness of the need for and commitment to the maintenance of high professional standards and social justice.
6	Project Management	Management is the ability to plan and to achieve desired goals to meet specified standards and criteria or to adapt to a changing environment through the effective co-ordination of available resources.
7	Critical Thinking	Critical Thinking is the ability to reach conclusions through reflection and evaluation by applying independent thought and informed judgement.
8	Problem Solving	Problem Solving is the ability to find effective solutions to problems through creative reasoning.
9	Business Acumen	Business Acumen is the ability to understand and contribute to the corporate culture and the business environment of the parent organization.
10	Self Management	Self-Management is the willingness and ability to develop a mature and balanced understanding of self. The ability to apply reflective practice to support ongoing personal and professional growth will enhance individual strengths and minimise weaknesses.

Table 3. The generic capabilities required by the Library and Information Professional of the twenty-first century.

of potential future career paths, and the constantly evolving discipline knowledge.

The students entering LIS education are not a homogeneous group. The students represent a wide diversity of differences including gender, personal interests, employment history, academic background and life experiences. These differences have significant implications for staff who aim to foster knowledge and skill within research methods as applied to the library and information context. The diversity in university education of students is one way of illustrating this point. From 2002 to 2004 the LIS students were invited at the beginning of year each to complete an

incoming student survey. A total of 107 completed surveys were received. This survey provided a basic profile of the students which could be used to further develop and refine the education program to the student's specific needs (Hallam & Partridge, 2005). In terms of previous education, 81% of the students surveyed had entered the library program as their first postgraduate course. The majority of students had an Arts degree (53%), with education graduates being the next most significant grouping (13%). 17% of respondents had completed a vocational course in addition to their university studies, with 26% having multiple university qualifications, eg more than one bachelor degree or postgraduate qualifications such as a postgraduate diploma, honours or masters degree. The main foci of the additional qualifications were education, business and information technology, although there was an eclectic range of fields including retail, tourism, horticulture and community services. Those students who had postgraduate qualifications included Honours (5.5%), Masters (4.5%) or postgraduate certificate or diploma (8%). There was one student who had a PhD. So whilst some students may have obtained research training though post graduate qualifications, for the majority of students this was not the case. Also of interest is that students have completed their earlier education at different universities, with the result that it was unlikely that there were many common denominators in terms of the research methodologies experienced. The QUT context is probably no different to many universities in Australia or, indeed, around the world.

The students entering LIS education have very different future career paths. One of the more interesting, and challenging, aspects of library education is preparing students to be successful in one of the many possible career choices. The students entering LIS education at QUT all have very different career ambitions. This was clearly demonstrated in the 2002-2004 survey of LIS students enrolled in the QUT program. The 107 students were asked to indicate what type of library or information work they would enter upon graduating from the LIS program. They were given the option of nominating: public, academic, government, law, special, other, no preferences. If they nominated special or other they were asked to elaborate on their choice. Study findings clearly showed that students had very diverse career goals with a large percentage of the students indicating an open future with either no specific preference provided, or a preference for 3 or more of the options. Possible future work contexts identified by students included libraries or information agencies specializing in: arts and multimedia, music, environmental management, landscape architecture, archives, information broker, medical information, knowledge management, website development, and school librarianship.

One of the biggest challenges facing contemporary library education is developing a curriculum that encompasses the traditional and enduring knowledge of the

profession alongside the new and emerging areas. Put simply the library curriculum is becoming increasingly congested. This is not a new problem. In 1992 Clayton observed that “it is simply not possible to cover all the essentials for professional preparation in a single short year. The [library] schools are already torn between the need to provide a theoretical basis for information work that will be of enduring value, and to equip graduates with skills that will be of marketable value in a very tight employment situation. As a result research gets left out” (p.74). Even though QUT has this year extended its LIS program to one and a half years (as opposed to one year), the challenge to deliver a well rounded curriculum continues.

Evidence Based Information Practice: The QUT Teaching and Learning Model

The MIM program has been designed and developed as a positive, non-threatening learning context through which the future library and information professionals may acquire “the conceptual structures and thinking processes of [their] discipline” (Toohey, 1999, p55). The individual’s journey to becoming a professional involves active engagement with two processes: individual change and development by acquiring new knowledge and attitudes, and adopting the cultural dimensions of the profession itself (Boshuizen, Bromme and Gruber, 2004). The MIM course seeks to support the students’ transitional journey into the LIS profession through the interplay of a range of teaching and learning strategies. The program is underpinned by the holistic philosophy that encourages the development of the whole person through a curriculum that successfully encompasses both discipline knowledge and generic capabilities. Specific characteristics of the program include the direct involvement of industry practitioners, authentic learning activities, research skills and reflective practice.

The seamless integration of the two dimensions of learning, discipline knowledge and generic capabilities, achieving a balance focus, time and resources within the 13 week semester timeframe remains an ongoing challenge for the MIM teaching team. Each of the three semesters has been carefully crafted to provide a scaffolded learning context for the students to provide a guided curriculum that allows them to progressively develop their skills and knowledge. Each new semester helps the learners build upon the skills and knowledge acquired in the previous semester. Rather than having whole subjects dedicated to the development of specific generic capabilities within the curriculum (cf professional studies units), the academic staff at QUT have adopted the view that generic capabilities are best learnt when contextualised within the discipline itself.

The involvement of industry practitioners contributes significantly to the success of QUT’s holistic model of LIS education. Industry professionals provide the authentic

context from which students can directly learn about discipline knowledge and generic capabilities within the profession. At QUT, industry practitioners have taken on three vital roles in the MIM learning environment: as guest speakers, as mentors and as industry partners in the learning activities.

The importance of real world examples cannot be underestimated, as students need to appreciate the application of the theoretical structures within a range of diverse situations, given the individuality and often uniqueness of LIS institutions. Drawing guest speakers into the academic program is therefore an integral ingredient in this learning environment. It is through the direct involvement of practitioners that students grasp the amazing diversity of information problems and the range of possible approaches to solve them.

Reinforcing Kolb's (1984) views that "an excellent education in any field should extend beyond the classroom", valuable learning is achieved through the mentoring program run jointly with the professional association, ALIA, which involves students being paired with an industry professional. The mentors and mentees get together in their own time and in their own ways: some in the workplace, some more socially over coffee or lunch. Mentoring is a natural part of life for information professionals, as noted by Field: "It is part of the ethos of our profession to share knowledge. We are not natural competitors like those within the business world. (Mentoring) is an excellent way for professionals to leverage their expertise and serves as a mechanism to continue their own professional growth" (Field, 2001, p.273). Mentors can also foster an understanding of the relevance of generic capabilities in the workplace, such as problem solving and critical thinking as well as lifelong learning, to be able to deal with a range of complex situations, ethical and moral principles. The program is therefore an example of a strategy designed to meet the need for more elaborate induction programs for new professionals "with greater obligations on the professions to participate in professional education through coaching and mentoring programs – in association with universities" (Gonczy, 2001, p.2). At the same time, the industry practitioners personally gain a great deal by being introduced to the current approaches to learning at QUT which include the focus on reflective practice and evaluation.

Through the learning tasks themselves, industry practitioners and employers offer a fertile context for students to apply the skills and knowledge they are acquiring within the academic confines of the MIM. Fieldwork placements and industry based projects are an invaluable source of linking theory to practice within an authentic learning environment. They also provide the opportunity for students to begin to think critically about the skills, knowledge and attributes that they are personally developing as they progressively acquire the conceptual structures and thinking processes of working information professionals.

It should be noted that the MIM teaching team believes that the primary aim of the MIM is to prepare graduates for their roles as future library and information practitioners, rather than as academic researchers. The MIM, like many other LIS education programs in Australia, is a course work program. Whilst QUT does offer both a Masters by Research and a PhD program, and students are actively encouraged to pursue these avenues at some point in their career, QUT is very much aware that academic research is not a path that the majority of MIM graduates initially wish to follow. Consequently, the MIM has a focus on fostering skills in evidence based practice or research in practice, rather than academic research. To this end the teaching of research skills has been embedded in the context of the discipline knowledge itself.

Research skills are specifically introduced to students within the second semester unit, ITN276 Information Services. Students learn about the range of research methodologies that can be applied within the working environment. They are asked to undertake a major group project which requires them to gather sound evidence that will allow for a critical evaluation of an existing (real) information service. Students work with the industry practitioners who host the assignment to consider the research methodology which is best suited to the evaluative tasks they undertake. This assignment is valued by students as it gives them the opportunity to develop sound foundational skills which they can use once employed in industry. For those students interested in further developing and refining their research skills an elective unit – ITN315 Information Management Project – is available for students to undertake industry based projects that require the student to draw on the wide spectrum of skills and knowledge they have been developing in the MIM, including research skills or evidence based practice. Increasingly, libraries and information agencies in the region are contacting QUT staff to initiate interesting and challenging project work that enables students to become directly involved in authentic research activities.

The focus of the major assignment in ITN276 is primarily on the process of research rather than on the final product itself. Students are asked to reflect on their learning through the tasks they have completed and to consider how they would improve on the approach taken in a future scenario. Reflective practice is increasingly identified as a core skill required by all professionals. For many students entering the MIM, reflective practice is a novel and unexplored – and often challenging – domain. Taking this into consideration the MIM program has been designed to provide students the opportunity over the three semesters to progressively gain both theoretical understanding and practical experience in reflective practice. Four units over the three semester long program have been developed to provide the context for the students to learn about, and experience reflective practice first hand:

- ITN273 Information Retrieval (Semester One) provides the opportunity for students to develop a theoretical understanding on reflective practice and to begin using reflective practice as a tool for self evaluation as they develop their information literacy skills.
- ITN275 Information Organisation (Semester Two) allows students to consider the role of reflective practice as a vehicle for self directed learning as they compose a reflective learning journal to support the construction of their own understanding about bibliographic database development.
- ITN276 Information Services (Semester Two) allows students to learn about the role reflective practice can have as a tool for professional development in other skills such as teamwork project management and informed decision making in the context of the information service evaluation.
- ITN280 Professional Practice (Semester Three) provides the students the opportunity to observe and use reflective practice within the context of ‘real life’ information work as they complete their fieldwork placements. Their studies conclude with the creation of a professional portfolio which presents their reflections on their own role as an information professional.

Table 4 provides a brief overview on the learning outcomes for students over the course of the three semesters as they develop their skill and knowledge of reflective practice.

Semester One

On successful completion of this semester students will be able to:

- Discuss the concept of reflective practice as a learning tool (ITN273)
- Write a short reflective discussion on an activity experienced. (ITN273)
- Write a short reflective discussion that critically evaluates the strengths and weaknesses of their own work including a grade allocation. (ITN273)

Semester Two

On successful completion of this semester students will be able to:

- Compile a self paced learning journal over a 13 week period to assist with skill acquisition and knowledge development in a specific area. (ITN275)
- Apply the principles of reflective practice to team, self and goal development within the context of a group project team. (ITN276)
- Discuss the concept of reflective practice as a professional development tool (ITN276)

Semester Three

On successful completion of this semester students will be able to:

- Observe and comment on the role of reflective practice within a ‘real life’ work context (ITN280)
 - Demonstrate their ability to apply reflective practice in the development of a professional portfolio (ITN280)
-

Table 4: Scaffolded approach to reflective writing skill and knowledge development

The model developed and implemented by QUT, incorporating a blend of discipline knowledge and generic capabilities, industry involvement, authentic learning activities and reflective practice, is but one example of an approach to embedding EBP within an LIS curriculum. As the model itself is embryonic, it is far from being a final, fully developed approach to educating the contemporary library and information professional for success in EBP. By way of ‘practicing what is preached’, QUT LIS educators are themselves reflective practitioners who engage in their own evidence based teaching by continually questioning, reviewing and examining their approaches to learning and teaching, and by gathering evidence from students, recent graduates, industry practitioners and the professional literature to further develop and refine the learning activities within the curriculum. Evidence of this reflective approach to LIS education can be found in several recent publications (Hallam & Partridge, 2002; Hallam & Partridge, 2003; Partridge & Hallam, 2003a; Partridge & Hallam, 2003b).

Discussion

Evidence based practice can be regarded as one of the most significant contemporary developments for the library and information profession. At the IFLA conference in 2003, Tord Hoivik suggested that “evidence based [information] practice represents something different: a deliberative approach to change” (p.5) and that by embracing evidence based practice the LIS profession is acknowledging, and reaffirming, that it is a “learning profession” (p.6). But how does the LIS profession embrace and foster a culture of evidence based practice? How does it commit itself to becoming a “learning profession”?

The issue of professional learning and how a professional evolves has been considered by Boshuizen, Bromme and Gruber (2004). This work provides an interesting insight into the broader areas of professional development and preparation. The authors propose that a professional, regardless of their discipline, progresses from the status of novice to that of expert by “a process of continually

transforming the repertoire of knowledge and skills that make up expertise". In short, they suggest that lifelong learning is the key to a professional become an expert in their own field. According to Boshuizen et al, a professional must develop both academic knowledge and professional knowledge, with academic knowledge imparted via formal training in a university and subsequently transformed into professional knowledge by learning in the workplace.

Booth (2002) observed that one of the main assumptions in fostering a culture of evidence based practice is that "practitioners are enlightened enough to want to practice evidence based practice". For EBP to succeed therefore, library and information practitioners need to be willing to develop the skills and knowledge essential for evidence based practice and to be motivated to use these within the context of their day-to-day work. Whilst current LIS education can help to foster the birth of a new breed of evidence based information professional, ultimately it is up to the new professional working in industry to put into place the skills they have learned during their academic studies. It is also the responsibility of those practitioners who have been in industry for some time, and who have not had the opportunity to learn about EBP via their formal library studies, to develop the necessary skills, knowledge and understanding of EBP by undertaking professional development (PD) activities.

However, the individual practitioner clearly cannot succeed in developing a culture of evidence based practice without the support of both their employer and their professional association. Employers have a responsibility to provide an environment that encourages and rewards EBP and to provide access to the resources and training needed to implement EBP within the work context. Professional associations have a responsibility to encourage, enable and reward the development of EBP skills and knowledge within the profession as well as developing and articulating the profession's EBP policies and future directions.

These views suggest that, whilst formal LIS education has a vital role to play in fostering a culture of evidence based practice (be it as advocated via the QUT model through the development of reflective practitioners or through any alternative models employed by other LIS educators) within the library and information profession, success will only be achieved when all stakeholders in the profession actively work together to build the desired culture. For the LIS profession this means cooperation and collaboration between library practitioners, library educators, library employers and the professional associations. Table 5 illustrates the contribution that could feasibly be made by each of the different stakeholders in pursuing the EBP goal.

In 2004 Peter Macauley, a librarian at Deakin University challenged Australian LIS practitioners and educators to reconsider what is relevant and necessary training and education for the profession in terms of research skills. Macauley argues that the "PhD has a place in professional practice". He suggests that the doctorate is the

Stakeholders	Roles or Responsibilities
Practitioners	<p><i>Individuals have a responsibility to:</i></p> <ul style="list-style-type: none"> • Have the motivation to be an evidence based information professional. • Ensure that they acquire and maintain the knowledge and skills necessary for evidence based practice by completing professional development programs • Undertake work based or higher degree research and actively take a role in establishing a clearer and stronger link between theory and practice within the profession • Strive towards completing higher degree research degrees
Educators	<p><i>Educators have a responsibility to:</i></p> <ul style="list-style-type: none"> • Provide and promote educational courses and qualifications necessary for developing evidence based information practitioners • Seek opportunities for updating own practical skills and knowledge to ensure relevancy and currency of curriculum • Provide and promote research degrees such as Masters by Research and PhD's to the profession. • Develop and deliver professional development courses in the area of evidence based practice. • Actively pursue research activities to generate new theoretical knowledge. • Seek opportunities for cooperative research and development activities
Employers	<p><i>Employers have a responsibility to:</i></p> <ul style="list-style-type: none"> • Provide the opportunities and resources for practitioners to engage in evidence based practice, including dissemination of findings to the profession • Encourage and allow their staff to engage in ongoing learning and professional development necessary for maintaining skills and knowledge in evidence based practice • Provide opportunities for LIS students to learn about evidence based practice in situ through fieldwork and project work • Participate in LIS course advisory work • Serve as guest lecturer/tutors within Library education programs • Include evidence based practice activities as part of the staff appraisal program • Encourage mentoring of evidence based practice for novice or inexperienced research-practitioners • Provide opportunities for collaboration with academic researchers and other industry employers on research project and funding
Professional bodies	<p><i>The professional association has a responsibility to:</i></p> <ul style="list-style-type: none"> • Encourage, enable and reward the learning and development of skill, and knowledge in evidence based practice within the profession • Determine and articulate a policy position on the role of evidence based practice for the profession as a whole and in the education for library and information professionals specifically • Encourage employers to support evidence based information practice by recognising institutional members' involvement in, and dissemination of, evidence based projects as eligible for individual's PD points • Ensure that the profession's research agenda, priorities, values and expectations are heard in government and by other key policy and decision makers • Offer research awards and funding opportunities • Facilitate forums for sharing and dissemination of evidence based practice knowledge • Arrange partnerships with training providers to provide training courses in evidence based practice tailored to the specific needs of diverse contexts (i.e. public libraries, law libraries etc)

Table 5: Stakeholders' roles and responsibilities.

“ultimate in professional development” for the library and information professional. It “is a flexible, multi-vocational form of training, and is well suited to professionals undertaking applied (and theoretical) research in the workplace” (p.6). Macauley suggests that the benefits of a doctorate are many “including an opening of your mind – and hopefully the minds of others; getting out of your comfort zone; the ability to critique the work of others, and for others to critique yours; and importantly, to make a contribution to Australia’s knowledge base” (p.6). Macauley concludes by proposing that “undertaking a doctoral program of study will make a significant contribution to professional practice and in doing so enhance Australian’s reputation as a knowledge economy” (p.6). Macauley argues that the LIS profession cannot – and should not - rely on practice alone. Practice should be based on the evidence gathered through our own research activities.

In the US the ALA shows its support of EBP by the inclusion of research skills within its Standards for Accreditation of Masters Program in Library and Information Studies. LIS Programs should reflect “the importance of research to the advancement of the field’s knowledge base” (1992, p.3). A direct reference to the important role of EBP within the profession in Australia can be found in the Association’s research statement which asserts that ALIA:

strives for best practice by promoting research which underpins innovation and by fostering a research culture where applied workplace research and the communication of outcomes support improvement and effectiveness in the provision of library and information services. (ALIA, 2002, para. 3)

ALIA outlines its goals for fostering research, to provide for:

- Encouraging research for innovative practice leading to excellence in professional practice
- The formation of partnerships between the Association, educators, researchers and the workplace so that there is a sharing of knowledge for mutual benefit in the conduct of research for innovative practice
- Support to new practitioners thereby building a research culture and increasing the capacity of the field for research which informs professional practice
- Research activities that are scientific in nature and of value to Australia:
(i) in the application of library and/or information service to improve practice in Australia; and (ii) in the extension of knowledge to add to the sum total of knowledge in library and /or information science. (ALIA, 2002, para. 6)

In commitment to these goals, ALIA launched the Research and Exchange Partnership (REAP) as a partnership which will “enable the Association to become more pro-

active in the support and encouragement of Australian library and information (LIS) research, particularly research based in information practice". REAP has been established as "a network of peers working together to exchange ideas and information... to bring library and services practitioners and researchers together, both face-to-face and online to share ideas, information and experiences about doing research and using results of research" (ALIA, 2005, para, 2&3).

However, despite the rhetoric, at this point in time the achievements of REAP remain low key and require a considerable injection of energy to stimulate a greater level of collaborative activity. As an association, ALIA is challenged to build on the initial REAP program to truly promote and encourage research as a key driver for professional development. By hosting the 3rd Evidence Based Librarianship Conference to be held in Brisbane, Australia, in October 2005, ALIA has a chance in the near future to play an important role in encouraging a better understanding of the issues, as well as encouraging a stronger degree of commitment on the part of practitioners and employers. Whilst LIS education can adopt a proactive stance in fostering EBP within the profession by including relevant and necessary skills within the LIS curriculum, an evidence based culture within the library and information profession will not be achieved unless all stakeholders are actively and proactively engaged with the process.

Conclusion

The QUT teaching and learning model presented in this paper is just one possible approach to embedding EBP within LIS education. The model adopted by QUT reflects the belief that fostering a culture of evidence based practice requires LIS education to serve as the cornerstone to equip library professionals with the necessary skills and understanding to become reflective practitioners in an evidence based industry, with the aim of progressing professional knowledge. Accordingly, QUT strives to develop a curriculum which focuses on content that is topical and relevant, but which at the same time helps develop the individual dimensions of the students so that they graduate with a sound understanding of the full spectrum of professional and personal attributes that they will need for successful careers as LIS professionals. It would be beneficial for LIS education, and for the future of the library and information profession in general, if other teaching and learning models were presented and critically discussed. This profession requires an informed discussion at both the national and international levels about the specific skills and knowledge required by the evidence based library professional, about the best manner teaching and learning approaches that will help to prepare and educate future evidence based professionals, and about ways to firmly establish an evidence based culture within the profession, so that the profession itself truly has a future.

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Abstract

Evidence Based Practice (EBP) has recently emerged as a topic of discussion amongst professionals within the library and information industry. Simply stated, EBP is the process of using formal research skills and methods to assist in decision making and establishing best practice. The emerging interest in the EBP within the library context serves to remind the library profession that research skills and methods will ensure that the library industry remains current and relevant in a rapidly changing environment. The future of EBP within the library context relies upon effective cooperation between industry professionals, library science educators and professional associations. This paper will consider the role of library science education in ensuring the future of EBP within librarianship. Aware of its role to industry as

a supplier of employees to the marketplace, the Queensland University of Technology (QUT) is continually reviewing its library science curriculum to more readily embrace the needs of current industry practice. This paper will discuss the teaching and learning model that is being at the Queensland University of Technology to foster student awareness and understanding of EBP and its practical role in the library and information industry. The paper examines the experiences of both the teaching staff and the students in practicing EBP within an industry context and considers the contribution the course makes in developing an EBP culture within the Australian library and information profession.

Measuring and Mapping the Invisible: Alternative procedures to understand users' approaches to information in a university library

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1. A first-class equipment apparently successful

With 13 000 sq. meters, 1 500 seats, 86 employees (including 47 qualified librarians), 360 000 books (half of them in open access), over 1 000 periodicals, 100 computers giving access to a broad selection of electronic resources and journals, and open 60 hours and 6 days a week, the University Library of Saint-Denis offers its public a first-class equipment and some of the best collections and services a French university library can provide in the fields of arts, humanities and social sciences.

The construction in 1998 of this luxurious building by famous French architect Pierre Riboulet was both a major investment and a strong political and social commitment for the French Ministry of Higher Education and its local partners considering the environment and the population of the Saint-Denis University. A major commitment as 35% of the 27 000 students come from abroad (mostly North Africa, South America, Asia and Eastern Europe). Furthermore, a large part of the student population is considered to have fewer chances than others to achieve academic or professional success due to their educational, social and cultural backgrounds. In addition, access to the library is granted to any person over the age of 18, which means that a significant part of its visitors are adults and young adults from the suburban neighbourhood, a vast residential lower-class no-man's land with no public equipment approaching anywhere near the size or the networking opportunities offered by the library.

The Saint-Denis University Library was the first institution to benefit from the Millenium National Plan for the modernisation of French universities in the early 90's. As a result, it does not suffer the usual problems which affect too many French libraries: no budget or staff cuts, no opening hours "wars", no space saturation nor degradation. Six years after its spectacular opening, the library is indeed proud of its success : in 2004, over 62 % of the students were registered library users and borrowed at least one book, and everyday between 3 500 and 6 000 people come to the library to borrow, browse, copy or print documents and use its various services. Most statistics show a quantitative rise in library activities while the University population has remained stable in the past years¹.

2. New problems and the need for alternative evaluation procedures

In spite of these encouraging figures regarding attendance, loans and consultation, many feel that the gap between the librarians' understanding of the library functions in relation to its everyday and actual use by the public has been increasingly widening. When taking time to discuss with students, or observing what they actually do between the shelves, we realise that the library is not perhaps the beautiful and well-oiled machine devoted to academic knowledge one would believe it to be at first glance. It is, of course, like most libraries, a place of collective and individual appropriation. No one among the staff finds it shocking or disturbing that students should use the library to get together and do other things than reading books and surfing the electronic resources. But now that we have entered a new phase in the life of the institution (passing from project and construction excitement to the actual management of services), we are encountering new problematic service situations.

The collective anxiety among our librarians expresses itself in sentences such as "students aren't what they used to be"; "we don't know where we're going" or "what shall we become?". Our staff is globally committed to its job, but is confronted to an identity crisis that is not specific to our institution : changes in strategy cannot be achieved without their contribution and their involvement. But there have been major changes indeed in the cultural, social and academic practices of our students. Statistical information about loans or attendance is not enough to interpret these changes. Massive impact does not mean qualitative success.

The problem we currently perceive is therefore a persistent feeling that the library still remains a place of misunderstanding where (too) many people get lost and waste their time looking for something they cannot find. Besides, less than 13% of faculty uses the library services on a regular basis, despite its central, attractive and visible position on the campus. We must endeavour to more actively promote our services to this key academic community.

Fig. 1

Indicators for Paris 8 University Library	Paris 8 U.L (2004)	Paris 8 U.L (2003)	Greater Paris Social sc. Lib. (2002)	Greater Paris U.L (2002)	France U.L (2002)
Number of students for 1 seat	16.8	17.2	37.5	22.8	20.4
Sq.m per student	0.49	0.48	0.33	0.39	0.44
Number of students per public computer	288	316	498	303.5	303
Number of registered users per qualified librarian	236	221	230	269	210
Weekly opening hours	60	60	55.6	54.9	52.4
Opening days over 1 year	244	237	252	243	235
Average number of loans per registered user	12.5	11.4	5.5	7.9	12.2
Number of registered users/ student population (%)	62.1	58.1	36.5	50	45
Documentary spendings per student (Euro)	30	26.1	23.9	35	34.3

Number of books per student	11.2	10.5	22.3	16.7	14.8
Number of new books per student	0.7	0.56	0.35	0.4	0.43
% of books in open access	58.7	60.4	16.8	31.4	46.7

Overall, time has come to question the impact of the library on its public and to renew our practises in providing information and assistance : and we now need new sorts of data to analyze these service questions and to elaborate an alternative strategy for the development of public services. To sum up, our librarians need to collect information in order to:

- question the ways they work with users and make decisions for change in that respect;
- improve communication with staff;
- improve communication with the academic community.

A first step towards developing new evaluation procedures was to define a list of priorities for which we felt we needed, if not exhaustive and objective data, at least some food for thought: information literacy programs ; staff training schemes; daily management of information services (information desks, mediation, assistance...); space organisation, signage and classification schemes; development of the library OPAC, website and implementation of a new information system... These were the key issues which required some strategic exploration.

Although these various projects involve specific skills, functions and people in the library, all of them fulfilled the need to gather information to answer the following questions:

- What really goes on between users and librarians? What do librarians do behind their desks? - Should they be working differently? Should they still be on the front-line rather than in the backstage of the library?
- What do users actually do in the library? How do they circulate in the building and navigate on the computers? What are they looking for.... and can they find it?

These questions are, of course, rather dangerous, not only because honest answers could seriously disturb the institution and destabilize librarians, but also because the issues addressed are terribly human ones. Measuring human interaction, learning, cultural appropriation in a library is much more difficult than merely counting books or web sessions. It also requires skills that are usually not familiar to most librarians.

What makes such considerations even more complex in France is the lack of an evaluation and marketing culture in public services in general and in libraries in particular. Things have been slowly changing in the past ten years thanks to structural reforms at the governmental level and to the generation renewal of the pool of active librarians. Librarians now receive education in these marketing fields. However, our cultural and professional context is not necessarily the most encouraging one when it comes to measuring such factors, as well as considering the public otherwise than a sacred and indivisible “whole”, doomed to absolute ignorance without the divine intervention of a librarian.

The executive staff of the library has accepted the challenge of involving itself in the testing of new techniques to observe the public and to learn from their own perceptions and practises. The goal is to escape narrow visions of what a library should be and to adjust its services to the local needs. What we wanted overall was to get closer to reality. Of course we were at the same time both excited and scared about what we would find.

It must be said that we did not start from scratch. Quantitative analysis and statistics have been part of the library management culture for over a decade and have already provided useful data for the monthly and annual reports. For instance, we post every month a “library services chart” on information boards and on the library Intranet as well.

This type of document provides a visual representation of the activity of the library. It proves to be a useful tool to communicate and discuss collectively issues and decisions regarding work organisation. For instance, if we observe on the chart (see fig. 2) a high number of absences for the staff (many people got sick or went on holidays at the same time) while student attendance was very high in the library (during term exams for instance), it could explain why everyone working during that month felt exhausted and was not able to complete the expected acquisition or cataloguing work. This may seem somewhat amusing, but it helps management realise and negotiate things as obvious as: “it’s better for the library if employees take holidays when public attendance is low”. As for sick people, it goes without saying that charts are of little help.

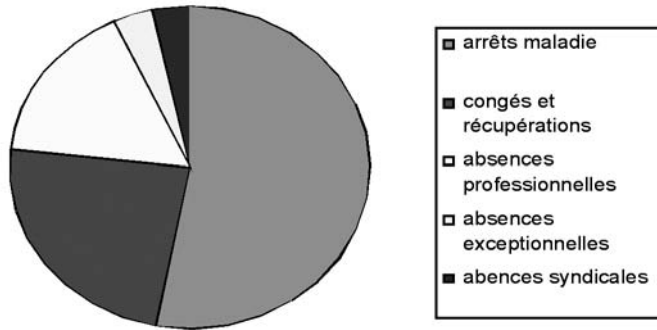


Fig.2: Public services work organisation chart for January 2004 (excerpt):

- 12 hours of planned service could not be done for lack of staff
- 37 people needed to be replaced
- 145 days of absence, which makes an average of 1,9 days per employee

3. Testing weeks: counting questions to measure mediation activity in the library Methodology

The goal of this procedure is to collect data about the interaction between users and librarians. Communication and loan of documents are not included in the protocol since they are automatically measured all year long thanks to the library system. Testing weeks focus on mediation and information work, that is the very “human” part of service that cannot be evaluated by machines. Since qualitative analysis cannot be automated and requires substantial collecting and interpretation work, it is not possible to undertake an ongoing evaluation. Therefore, following the recommendations of the ISO 11620 Standard on the Evaluation of library services, we chose two sample weeks over the year: one week during a period of low student attendance (February, in-between academic terms) and another one during a period of high student attendance (December, just before term exams and holidays).

We tried to measure both quantitative and qualitative aspects of mediation:

- quantity: how many questions were asked, when (which day, what time?) and where (which information desk or other area of the library?).
- quality: what types of questions were asked? We selected the following items, which matched our own interrogations about the work being done (see fig. 3):

During one week, at every information desk, as well as for “flying librarians”², librarians counted questions they had been asked (or asking) and classified them according to the nature of the information that had been shared or of the service that had been offered. The grids used to collect this information are as follows:

Fig. 3

Reference and bibliographical assistance: identify and localise a document in the catalogue ; write a bibliography for a specific subject; use a database; find the reference of a journal...These questions require a qualified librarian's skills.

Orientation: "where can I find the book with call number 340.24 ?" "Where are the toilets?" "Where can I buy a copy card?" "How many books can I borrow?"...These questions require a good knowledge of the library building, rules and services.

Technical assistance: "I don't understand how to print this article." "I can't access this website from my computer." "The printer is out of paper." "Could I borrow a pen from you?"... These questions require basic or specialised skills in maintaining computer soft and hard-ware and other practical matters or materials such as copy machines.

Social mediation: "Can you help me write my curriculum vitae?" "French isn't my mother language , can you help me translate this sentence?"...These questions require a social worker's skills and a good understanding of foreign cultures and languages.

Regulation: "Would you please shut off you cellular phone?" "You're not allowed to eat a sandwich in the library" "you're not supposed to surf porn-websites on the library computers"...

Specific services: interlibrary loan; book reservation; acquisition request...

Telephone: questions asked on the phone.

Fig. 4

DESK/ ROOM: ...Social Sciences
 DAY:Tuesday.....
 TIME:11h-13h.....

TYPE OF QUESTIONS	QUESTIONS	TOTAL
Reference and bibliographical assistance	x x x	3
Orientation :	x x x x	4
Technical assistance :	x x x x x x	7
Social mediation :	x	1
Regulation :	x x	2
Specific services :		0
Telephone		0
TOTAL		21

Limits

The procedure has, of course, many limits to take into account when interpreting the collected data. Two weeks only over one year are not necessarily representative. Moreover, it is important to note specific events which may occur during the testing period that could affect attendance, for example a strike in public transportation or a failure of the information system. Overall, data will start to become truly significant only when compared over several years to observe long-term trends. Another important limit is that the whole protocol relies on staff acceptance and understanding of the procedure. Question counting implies a strong collective and individual discipline. Questions classification consistency depends on staff subjectivity and appreciation, for what the procedure actually measures is the staff's own representation of their mediation work rather than the actual work itself. Restricting the grid to a selected list of items illustrated with very concrete examples and good communication with the librarians before the testing period proved helpful in obtaining more homogeneous and reliable data.

Conclusions and decisions

As our point is to present evaluation practises rather than a complete library service policy, this paper won't go into all the conclusions of this experiment, but will only show examples of how collected information has proved useful in management and decision-making.

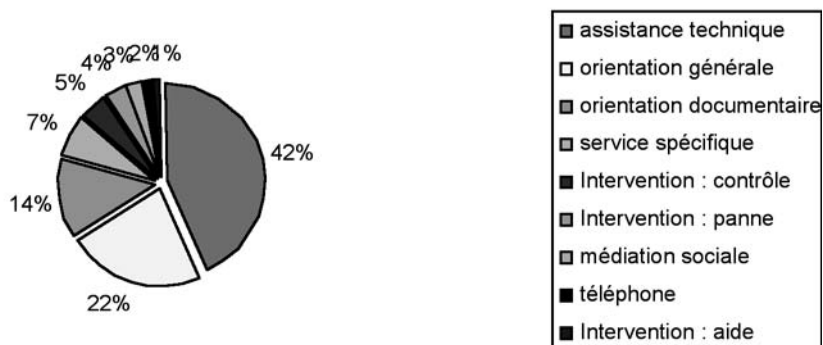
These conclusions mostly concern the transversal (or "macro") level of service management, that is, decisions affecting the library as a whole. But the collected data can also be used on a micro level, at every desk and thematic sector of the library. Hence the data can be used to identify, for instance, specific needs concerning qualifications and training of librarians in relation with questions addressed, academic disciplines, specific profiles of users, dedicated spots of the library and specific times of the day.

One example of such thematic or "micro" data exploitation is the reference desk. As you can see on the following graph, the main reference desk received a very low proportion of reference questions. We believe this is because the reference desk is installed in the room with the highest density of computers: the vast majority of questions are therefore questions about how to use computers, deal with printers and use floppy disks, CDs and USB keys.

As a result, reference librarians posted at this desk, the most qualified of the team, are very frustrated to work there and the public doesn't find the appropriate answers nor attitude when addressing their questions to them. Following the publication of the testing week results, we decided to reform totally the way this desk was organised and to engage a serious brainstorming about what reference service should be in a library like ours.

Fig. 5

La Salle Noire : Typologie des questions (12/ 2004)



What testing weeks taught us about our missions

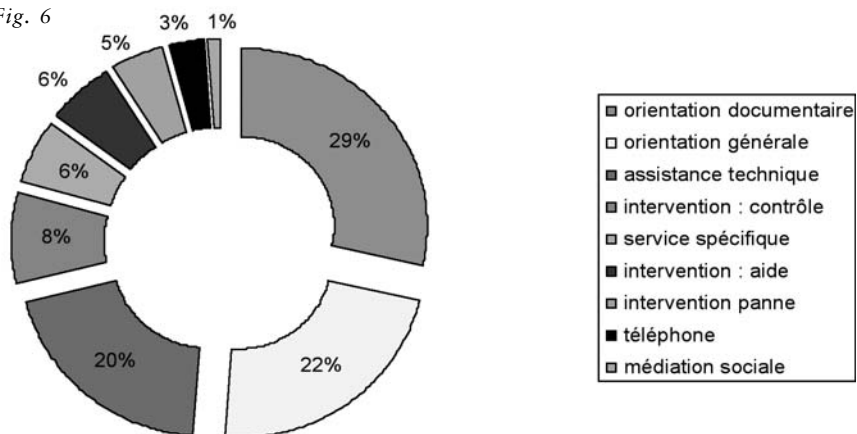
First of all, we realised that over 50% of the addressed questions required librarian skills and/or a good knowledge of the library building and services. For some of us, this didn't seem enough compared to the "Golden Age" of the library, but for most of us, this was truly reassuring news. It meant that, unlike what we had felt and feared, librarians still had a crucial role to play in the organisation of mediation and that their specific skills still matched a large part of the users' needs and expectations. It also meant that we were right to reinforce our policy on information literacy programs, working together with faculty to develop student education in the field of information and documentation.

What we changed in service organisation

The results showed that librarians were not really needed at certain times and places while more of them were needed at other times and places. After two testing weeks, we suppressed service between 6pm and 8pm at one desk which was deserted in the evening and added one extra librarian at the main entrance desk between 1pm and 3pm. We also decided to extend the service hours and the number of flying librarians because we observed that this form of service had the best results. In one hour of flying service, our staff answered many more questions than at a desk, and the larger part of these questions had to do with information searching and how to use library tools such as the classification system or the catalogue.

We also contrasted the results of the February and the December testing weeks. This led us to consider incorporating more flexibility in the organisation of services through the academic year, by focus on basic training and orientation in the first semester, especially for newcomers who discover the library, and by focusing on

Fig. 6



bibliographical and documentary assistance in the second semester for all students engaged in exams preparation and writing of term papers.

Lessons we drew for staff training

From the testing week results, we drew two important conclusions concerning strategic reflection on staff training:

First, there was an obvious need for qualifications and for training in the field of technical assistance and the use of computers (both hard- and software). Computer skills development was therefore to become an important priority for our training schemes.

Second, we were quite surprised to observe a very low proportion of questions matching the “social mediation” item of the grid. Talking with our colleagues and testing the procedure ourselves, we understood that the reason why the social mediation activity had so little visibility in the results was because it was extremely difficult to dissociate this form of interaction from the others. The need for social or cultural assistance and mediation was usually expressed together with other needs, either documentary or technical. We had originally planned to collaborate with social workers in order to learn from their experience, but we in the end realised this was probably not the best option. Instead, we decided to collaborate with professionals from other libraries in the suburbs who were experimented in mixing social and information skills. It became clear that these qualifications could not be taught separately considering the patterns of our environment and population.

Priorities we identified to improve service accessibility

The need for more accessible library tools was made obvious through the survey. Many of the results taught us that a significant part of the student questions were not bound to a lack of education in the field of documentation, but to a lack of “legibility” and accessibility of the library as a whole. The results of the testing weeks lead us to work on a better accessibility of both material and electronic resources by improving the physical orientation of users in the building and between shelves (classification, signals, signboards...) on the one hand and on the ergonomics of our OPAC and Information system on the other hand. These issues being totally strategic in the context of the library very specific architecture (which is beautiful but complex) and of our already old-fashioned information system, we decided to conduct a specific survey on this theme, which will be presented afterwards.

Conclusion about the testing-week approach

It would be either naïve or dishonest to pretend that the testing week procedures taught us all that we needed to know. For most of these conclusions, we had solid intuitions prior engaging the library staff in the test. Yet it proved to be very useful for the following reasons:

First of all, the results showed that if many of our intuitions found some statistical evidence, some of them turned out to be completely wrong. For example, because we never registered many new entries at the library after 6:30 pm., we thought we could close most information desks after 7:pm. But it occurred that this wasn't appropriate for all desks. Even though there were less people in the library, the public continued asking questions until late in the evening, as the atmosphere was more serene and industrious and the librarians were more available.

Second, and most important, testing weeks provided objective data which had been collected by the librarians themselves. This had a positive impact on making them reflect on their personal mediation practice. It lead some of them to contribute unexpectedly to the reflection we had started. Overall, it helped the library administrators to begin introducing and negotiating changes in the organisation of the services with the rest of the staff. Indeed, instead of intuitions, they could rely on facts, figures and graphs to describe and objectify more precisely their concerns and their goals.

In spite of its methodological limits, the protocol of testing weeks therefore matched two of our initial goals : collecting data for decision making in the fields of service management and staff training and improving communication with the staff by providing a collective representation of their own work in relation to the public with whom they deal.

4. Geography in the library, the travel journal test: an attempt to map students' paths

This second procedure relies on the evidence that librarianship can learn and benefit in many ways from techniques drawn from geography. For several years now, public libraries have been using tools such as information geographical systems to represent the activity of library networks over territories. For instance, one can represent on the map of a neighbourhood, a city or a district the spots and zones where library users are located. This tool is used to identify densities and gaps showing library activity and impact on the population. Such representations are of great help to make decisions and to negotiate the development of the library network with local administrators, including the construction or the closing of libraries, the circulation of mobile libraries or the choice of opening hours in relation to the organization of public transportation, for example.

Our main idea concerning the second procedure is that it is possible to apply a similar thinking and similar tools to the building of the library itself, which can therefore be considered a territory of its own. Especially in a big building like the Saint-Denis University Library (15 000 sq. meters) with heavy traffic (several thousands of visitors everyday) and a complex architecture, the library space can be compared to a mini-city. Circulation, social life and the organisation of services in this half-public/ half-private space can tell a lot about users' needs and practises and therefore help librarians adjust their service policy to the way the building and the collections are used by individuals and communities.

We worked together with scholars, professors and students from the Geography Department of our University to set up a survey protocol which focused on the spatial use of the library in relation with user's demographic and academic characteristics. We expected this survey to provide information about the accessibility of the various spaces and equipments of the building and the way they were identified by our patrons. In addition, we wanted the survey to question the satisfaction of users not by asking them "are you satisfied with the library" (for we know users can be satisfied or unsatisfied for reasons which have nothing to do with the library's missions) but by asking them a series of questions related to precise items, intentions and destinations. We basically wanted to ask the public:

- what are you planning to do and where are you planning to go?
(when entering the library)
- where did you go, what did you do, were you successful in your trip?
(when leaving the library)

And compare the answers to these two questions.

Fig. 7

QUESTIONNAIRE AND PROTOCOL

1. user's identity (student or other – level of studies – discipline of studies – sex – age – residence).
2. user's intentions upon arrival at the library
 - Do you know where you will go today within the library? If yes, where?
 - What are you planning to do in the library today?Meet friends

Use the copy machines

Find documents recommended by a professor

Make a documentary research

Borrow or return documents

Look for a job

Prepare exams using my personal notes and documents

3. Break Surf the Web

Read the newspapers

Others

After the first part of the questionnaire has been filled up, users are given a badge (name tag) that they accept to wear during their stay at the library. They are also given a travel journal where indications of the places they've been in the library will be noted by library staff and volunteers contributing to the survey. Library staff and volunteers are posted in 16 different spots of the library. Each time a user with a badge goes somewhere, a sticker with a space mark (colour, code) is put on his travel journal.

When leaving the library and coming back to the main entrance Hall, users return their badge and their travel journal and they answer the second part of the questionnaire.

4. What have you done today?

Patrons chose between all previous items (Point 2.), with additional questions giving indication of success / satisfaction.

5. Can you show us on this map of the library where you have been?

Limits

320 users accepted to participate in the survey. This represents a bit more than 1% of the total population the library is supposed to reach (27 800 students, 1200 scholars and faculty). Our geography experts, who had a solid expertise in demographics and statistics, agreed that the sample wasn't very large but tested its representativeness by comparing the age and gender of the sample population those of the total population who visited the library during these days. On the ground of their observations, the sample turned out to be representative, but only to a certain extent: according to the geographers, it was big enough to extrapolate observations made during the survey provided they concerned the totality of the sample. For example: it made sense to look at the global circulation of users in the various spaces of the library, or their global interest in some services rather than others, but it wasn't possible to draw further conclusions such as: favourite destinations or motivations of the Law or Arts students. Indeed, 10 to 20 students from the Law or Arts departments had been answering the survey, and this wasn't enough to represent the whole population of the Law or Arts departments.

As a result, we couldn't use the data as far as we would have liked, nor could we get the full picture for other sub-segments of the student population. We therefore restricted interpretation to what could possibly be analysed without ignoring basic statistical rules regarding sample representativeness.

After we collected the data, and even though 320 questionnaires aren't so hard to process, we realised that data computing was long and heavy considering the many questions we had asked in the questionnaire and the little resources we could use from our staff to do this job. It took six months to go through the data and find the best strategy to use it. The results were probably not worth the heavy protocol we had to settle to run this project. The benefit we drew from the survey might, however, and as we will see, not come only from the data we actually collected.

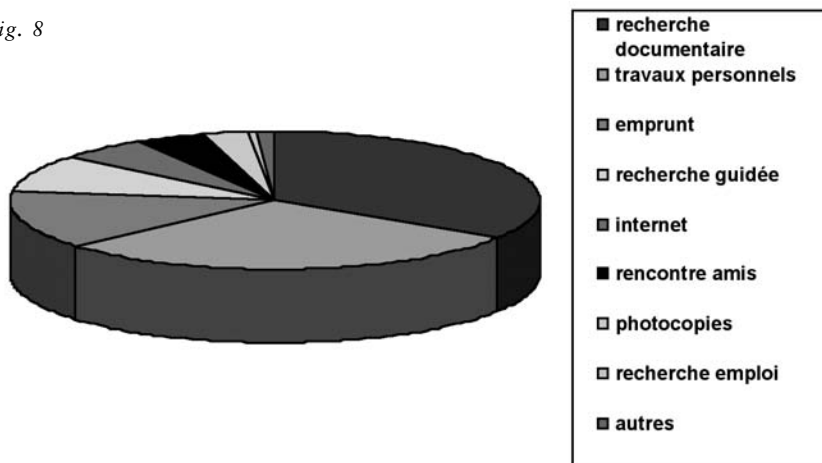
Results

As this paper is being written, many of the results are unfortunately still unavailable. First of all, we made a numeric map of the library. Then we worked really hard on the technical aspects involved in interfacing the collected data with the numeric map and the Information geographical system. We are about to "map" most of the results and therefore visualise the paths of our patrons over the library territory - but cannot show here what it looks like yet.

The most interesting results we have been able to collect so far relate to student activity in the library. 34% declared having searched academic information, to which one should add the 14% who declared having searched documents which had been recommended by professors. Overall, almost half of the motivations of

the students who came to the library were related to the primary documentary mission of the library. This figure is almost identical to the conclusions of the testing week and similar considerations can be applied. Moreover, 45% of the students declared having used the catalogue. We thought the catalogue was seriously competed by the Internet and other electronic resources, but we realized it still played an important role in the everyday use of the library. On the contrary, surfing the Web turned out to represent only 5% from student declared priority when entering the library. We should of course be careful with such declarations. But here again, we were puzzled by the results, which were rather positive and reassuring for the staff.

Fig. 8



Conclusions

At this stage of our project with the geographers, the points to keep in mind aren't so much the results themselves than the spatial frame of the procedure and its positive impact both on staff and users during and after the survey. We realized that a map of the library was the most effective media to discuss both intentions and results either with staff or students, because all have a tendency to identify their professional or academic identity with a specific space of the place where they work, especially when the space outside (in our case, a grey suburb) remains rather hostile and anonymous. Also, we observed that collective practises were very strong in the library due to the strength of communities in the population: maps are an appropriate media to represent group activity. It is easier to represent where people meet and connect on a map. As for staff, discussing activity and results over a map proved much easier than when using text, figures or graphs.

We therefore believe that the "mapping approach" is very promising to answer some of our initial concerns : student information literacy ; daily management ;

communication with staff ; and, of course, space organisation and intelligibility.

As a final conclusion to this paper, I would like to say that most of these experiments are being run in collaboration with an interdisciplinary team of scholars from the University of Paris 8 whose expertise covers a wide range of disciplines: geography, information technology, psychology, education sciences, psycho-ergonomics. This partnership is, of course, a way to cross-examine qualitative results from different academic perspectives and to open up the usual “librarian vision” of the library to broader approaches. From a political perspective, it is also an opportunity to change the status of the library inside the University from a mere technical service of documentation to a potential field of research worth of interest for the local scientific community. We hope the academic valorisation of the work undertaken on library users’ practises together with our colleagues from faculty will contribute to promote the library services and overall its image among the academic community.

Notes

1. Paris 8 University Library 2004 Annual Report, available online :<http://www-bu.univ-paris8.fr/web/bibliotheque/bilan2004.pdf>
Local and national indicators for French university libraries are published by the Ministry of Higher Education and available online :
<http://www.sup.adc.education.fr/asibu/>
2. « Flying librarians » are librarians who are not posted behind a desk but circulate in the library to offer assistance to the students. Our library has been experimenting this form of service for 5 years. It proves to be very useful, especially in areas of the library which are not equipped with a dedicated reference desk. It requires a motivated, flexible and highly committed staff.

Abstract

This paper focuses on experimentations run in 2004 at the Paris 8 University Library (Saint-Denis, France) in the field of qualitative measurement of library information, assistance and educational services. Statistics may show positive trends in the global activity of library services, but they don’t say much about the actual impact of the library among the academic population, especially for information literacy. The article reports on two case studies which attempt to explore new methodologies and new tools for evaluation, communication, management and decision-making for service administration. The goal of a first procedure called testing week is to collect data about the interaction between users and librarians during sample weeks. A second procedure relies on a survey and the use of a geographical information system to visualise and analyse the paths of students in the

library rooms. Both reports include the description of methodological protocols and concrete examples.

Résumé

A partir d'une étude de cas centrée sur l'organisation des services au public à la Bibliothèque universitaire de Paris 8 (Saint-Denis, France), cet article rend compte d'expérimentations engagées dans cet établissement en 2004 pour appréhender autrement les usages des lecteurs et les activités de médiation, de renseignement et de formation. Si les statistiques d'activité de la bibliothèque démontrent un usage croissant des services, il est en effet devenu essentiel d'évaluer de manière plus qualitative les pratiques du public et l'impact du travail des bibliothécaires postés à son service. Deux méthodes d'évaluation qualitative sont ici présentées. La première repose sur l'organisation de « semaines-test » durant lesquelles les questions du public sont systématiquement comptées et analysées dans les différents espaces de la bibliothèque. La seconde s'appuie sur une enquête et propose l'utilisation d'un système d'information géographique comme outil d'exploitation des données recueillies et de visualisation des trajectoires des lecteurs. Les protocoles méthodologiques illustrés d'exemples concrets sont présentés.

Libraries Building Communities: the vital contribution of Victoria's public libraries – A report on a major research project of the Library Board of Victoria and the Victorian public library network

Debra Rosenfeldt

*State Library of Victoria,
Australia*

Introduction

*Libraries are our best chance to create a centre of community spirit and activity
The most important thing to a community is reading, and what better place
to encourage this in the young than a library*

*It is the holder of much of the knowledge about the local area and gives us a
link to our past, present and future*

*Civic pride and fondness is generated by a well-used and friendly library
environment*

*The role of public libraries as key players at a community level in building
learning communities, and helping to form skilled and information-literate
communities is fundamental to the future wellbeing of Australian society*

These are powerful statements about the role and value of public libraries and they don't come from librarians, or academics, or politicians, or other particularly eminent people. They are the words of some of the 10,000 fairly typical Australian residents, many but not all of them public library users, who participated in the Libraries Building Communities project, which is the subject of this Paper.

Libraries Building Communities is a collaborative project of the Victorian public library network and the State Library of Victoria. It has been a groundbreaking piece of research in terms of both its size and complexity - the first comprehensive study of the value that public libraries add to their communities. The project commenced in April 2002, the reports were published in February 2005, and the work is ongoing.

From the beginning it was our intention that the reports would become an essential tool for all those engaged in advocating for public library services to decision-makers. It was also intended that the reports would help drive the strategic direction of public library services in Victoria; that they would be a practical planning aid to library managers; and that they would act as inspiration to all Victorian public library staff.

This Paper provides an overview of the research model and presents the main findings. It begins with a little background about the Victorian public library network and the political context for the Libraries Building Communities project.

Victorian public library network

Victoria is geographically Australia's second smallest State and its second largest in terms of population. It covers an area of approximately 277, 800 square kilometres (about 2/3 the size of Norway) and is home to just over 5 million of Australia's 19 million residents. Around 3 million of these live in the capital city of Melbourne. Victoria is divided into 79 local government areas and they all offer a public library service. There are 238 branch libraries and 30 mobile libraries in total. They hold approximately 9 million collection items and provide free access to the Internet with 1,200 PCs. About 2.5million Victorians, 51% of the community, are registered public library borrowers, although about 60% of the population uses public libraries. They make more than 26million visits to a public library service point during the year. They make 2.7 million reference enquiries and they borrow approximately 50million items. Public library services in Victoria receive annual funding of approximately 132million Australian dollars (84million Euro or 101million US dollars), or approximately 26 Australian dollars (16 Euro or 20 US dollars) per head of population.

The State Library of Victoria sits alongside the public library network. It is a public research rather than a public lending library. It neither governs nor provides recurrent funding to public libraries. However, the State Government's 1988 Libraries Act does require that the State Library provide leadership to the public library network and promote cooperation and high standards in information service delivery across the state. It is in fulfillment of this role that the State Library funds and manages a number of statewide projects, including the Libraries Building Communities project.

Political context

The State Library is funded by the State Government. Public libraries are funded by both State Government and local government authorities. Until the early 1980's local government authorities and the State Government shared this cost almost

equally. Over the years the balance has changed. State Government funding has declined significantly as a proportion. Local government now provides around 80% of the funding to public libraries. The funding environment in which public libraries are placed has become difficult and this has been one of the drivers for the Libraries Building Communities project.

Another driver has been government policy. The past ten years have seen the ideas and practice of community building emerge as a key policy theme for western governments as they seek ways to address the increasingly complex issues facing contemporary society. The Victorian Government has identified the need to nurture more resilient, active and confident communities as one of its most important strategic directions. The Government has approached this task by focusing on the potential already available in the community. Rather than emphasise the deficits and problems, and respond to these with needs-based services, the Government's community building activities draw instead on the strengths that exist within communities. Its approach is based on listening to local experience, supporting local connections, providing responsive services and investing in the infrastructure which makes communities good places to live and work.

If public libraries are not to be overlooked by local and State Government it is imperative that they demonstrate the strong synergies that exist between their work and the Government goal of creating resilient, active and confident communities. They must be able to show clearly how they engage with the whole community, especially disadvantaged and vulnerable groups. And they must be able to show how they help to achieve the community strengthening outcomes that the government has specified. These include improved skills in the community, greater access to services, more people participating in cultural events and celebrations, increased partnerships between community, business and government, community facilities being used for a greater range of purposes, an increased sense of belonging in a community, and people feeling safe at home and in public.

Current performance indicators

Since 1947 Victorian public libraries have been required by Government to report annually on a wide range of statistical performance indicators, which they do with great zeal. Most of the data collected relates to numbers of service points, opening hours, staff, registered members, loans, reference enquiries, items in collections, acquisitions and public access PCs - and the related expenditure. This is critically important data for measuring efficiency and cost-effectiveness of core public library services. However, it falls well short of providing our funding bodies with a complete picture of what they are getting for their money - the public library's breadth of role and diversity of services - and it does not say anything about who is using and not

using public libraries, or what value they add to the lives of people and the communities they serve. During the scoping of the Libraries Building Communities research many library service managers echoed the comment that senior government decision-makers still have ‘a stereotypical image of the library – and it revolves around books.’

There was a clear need for rigorously collected new data about public library services giving a greatly expanded view of their activities and usage. The data was needed for individual public library services and on a statewide basis. It was essential for it to be interpreted and presented in a way that was both easily accessible and talked the language of Government policy, if public libraries were to continue to be seen as relevant and their potential realised. So – What data did was gathered? How was gather it gathered? And what conclusions were drawn from the analysis of the data? First – the ‘how’.

Research methodology

An independent market research company was employed for the development and implementation of the methodology. Data was gathered using a variety of techniques. The data is both quantitative and qualitative and it is both statistical and in the form of comments from research participants. The survey samples are very large. Members of the community from culturally and linguistically diverse backgrounds were well represented, as were both metropolitan and rural residents. The majority of the data collection was carried out between May and December 2003.

It commenced with 24 focus groups conducted across Victoria with library staff, library users and non-users to identify the main themes, issues, opportunities and barriers. Thirty-five face-to-face interviews were conducted with community leaders across the State. These included local councilors, business people, school principals, and leaders of religious and other community groups. Data was collected on what public libraries currently do well, where the gaps are in services, and how community leaders see the role of public libraries in community development both now and into the future.

A telephone survey was then carried out with 400 randomly sampled Victorians, both library users and non-users. These interviews provided demographic data about library users and were instrumental in quantifying and validating the extent to which some of the qualitative issues raised in the focus groups and interviews were significant within the broader community. Finally, an online survey was used to collect data from users in every public library service in the state. Benchmark data was captured relating to library usage patterns; importance of and satisfaction with various services provided by libraries; social capital information, and demographic data. A massive 8,602 surveys were completed. This is the first time that

comprehensive and consistent data of this kind has been collected from public libraries across the state. Much of the data gathered from the online survey could be cross-checked with the data gathered from the telephone survey to strengthen the robustness of the results.

During the first half of 2004 additional information was gathered in the form of 34 case studies that demonstrate the innovative ways that public libraries in Victoria are meeting the needs of their communities. The case studies describe the approaches that have been used by libraries, the outcomes they achieved, benefits that have arisen for the community, how the practice links to community building principles, and the key lessons for the library service.

Survey results: Employment status of public library users

It is not possible to present in this paper all of the results of all of the Libraries Building Communities surveying. The following provides a sample only.

As a result of the Libraries Building Communities research we now have a more detailed snapshot of Victoria's public library users than ever before. We collected data about users relating to gender, age-groupings, household composition, employment status, occupational groupings, income groupings and language spoken at home. Public libraries have never before asked their users for this information. The data collected can be compared to Australian Bureau of Statistics data so that each library service can see how the profile of its users compares with the community profile and will be able to identify areas for improvement. The data showed wide differentials in the extent to which public libraries have succeeded in engaging their communities. Some libraries have been particularly energetic and creative in their approach, and this is reflected in their user profiles – which show high levels of patronage and strong representation of groups who are socially disadvantaged. Other libraries have been less successful – possibly due to low levels of resources, location of the library or the existing culture of the library.

The telephone survey results relating to the employment status of public library users statewide are particularly useful. It shows that across the state only 27 percent of library users work full-time. Another 27 percent work part-time, 5 percent are classed as unemployed and nearly 40 percent of users are not in the labour force (retirees; unpaid primary caregivers; students). These figures do much to refute the notion, still held by some, that public libraries are an institution for the elite who could well afford to pay for the services provided.

Survey results: Activities people undertake at the library

Data was also gathered from both library users and non-users about what they thought were the main benefits of public libraries, and users were asked about

their patterns of public library usage, including frequency of use and the range of services used. Twenty-eight separate services were identified. These ranged from the obvious services of loans of library materials, access to PCs and the Internet, availability of daily newspapers and opportunities for children to attend storytimes and school holiday activities, through to seminars and language and literacy classes; special services for people with disabilities, Indigenous people and the business community; access to local community information and services; local history services; use of meeting rooms by community groups, and opportunities to volunteer.

It was found that many people used the public library for social interaction. Seventy-one percent of users like to talk with staff when they visit the library, 34 percent talk with other library users, 22 percent talk with people who would not normally be their friend, and 18 percent meet new people. Public libraries are clearly seen to be safe and comfortable places for people to gather, a focal point for the community. They have an important role to play in helping people to connect with others, especially those users who are not in the labour force and live alone, and in this way they help to build social capital.

Survey results: Gap analysis between importance of services and satisfaction with services

In addition to asking users what services they used, they were asked to rate both the importance of a wide range of services offered by the library and their satisfaction with these services. The results were plotted against each other and where the satisfaction-rating fell below the importance rating a need to improve the service was identified. The services that were considered most important by library users, in order of importance, are: book loans, computer services, audiovisual loans, magazine loans, access to daily newspapers, special services to children and young adults, availability of local community information, and remote web access to the library catalogue and databases. The satisfaction ratings pointed strongly to a need for improvement in the way the three most important services are delivered.

Focus group participants were asked to place a monetary value on many of the services offered by public libraries. Opinions were sought from both focus group participants and community leaders to help identify the main barriers to library use, and they were asked to suggest strategies for reducing some of the barriers. Community leaders were also asked to provide advice on how public libraries could play a stronger role in community building and to help identify what needs to be done if they are to realize their potential.

Main findings

Percolating out of the data gathering, and the subsequent analysis and report writing during March to November 2004, the Libraries Building Communities research concludes that public libraries in Victoria make a vital contribution in four key areas and that they must continue to develop their services along these lines.

Overcoming the ‘digital divide’

A community’s social and economic development increasingly depends on how well its residents can access and use information and technology. The Libraries Building Communities research found that the ‘digital divide’, the gap between those who have and those who do not have the ability to access and use information technology is a matter of growing concern among community leaders and that public libraries have a crucial role to play in ensuring that people on low incomes and other disadvantaged groups are able to access information and technology and develop the necessary skills to use these. They do this by providing free access to computers and the Internet, often employing new approaches. The use of satellite technology by mobile libraries to provide Internet access in areas where residents do not even have television reception, is an outstanding example of this. Public libraries also run diverse programs aimed at assisting people to develop technology skills. A number of Victorian public libraries run computer clubs for seniors, which gives older, retired community members the opportunity to learn about computers at their own pace and in an encouraging, relaxed atmosphere. This is a segment of the community generally left behind in the IT sphere.

Creating informed communities

Helping to create informed communities was identified as the second main area where public libraries contribute to community building. The research revealed that many felt that information overload is a common problem faced by people today and that the growing volume of information is of no benefit unless it can be converted into knowledge. A high level of confidence was expressed in librarians as ‘trusted’ information experts, helping people to navigate their way through the mass of available information. Libraries were also seen by both library users and non-users as an important point for dissemination of both local community information and information about government programs and services. Many people in culturally and linguistically diverse communities believe public libraries could play an even greater role in providing a conduit to government information. Public libraries also increasingly provide a gateway to the world of networked information by having a web presence through which users are able to access the library catalogue and various databases.

Convenient and comfortable places of learning

The third area in which public libraries make a vital contribution to community building is through provision of a friendly environment in which residents can learn the basic skills they need to take part in the economic, social and cultural life of their community. The Libraries Building Communities research has shown that public libraries are greatly valued because they provide comfortable study spaces as well as learning programs, many of which are targeted at ‘vulnerable’ learners, those community members who are keen to learn but are not comfortable in more formal learning institutions or with the formality of accredited learning. These programs include English language and literacy classes for residents from non-English speaking backgrounds; topical lectures and seminars; and Homework Clubs for 13 to 16 year olds.

Building social capital

The fourth area in which the research shows that public libraries play a crucial community strengthening role is in building social capital: bringing people together from across the social strata; forging greater understanding of other perspectives and other cultures; offering a safe space that embraces diversity; and providing connection into the community for people who are otherwise excluded. Libraries do this simply by being pleasant places where people from all walks of life can happily and safely gather and talk with each other; by providing community meeting rooms; delivering library materials to people who are housebound or living in residential care; offering community noticeboards and displays; and hosting cultural and festive events that both celebrate the community’s diversity and contribute to the idea that ‘this community is a good place to be’.

In addition to identifying the four main areas where public libraries already contribute significantly to community building, the research highlighted the unique blend of characteristics that strongly position them to expand their current role in this area. Typically, libraries are free and accessible to everyone, even in the remotest areas. One out of every four named communities in Victoria has a public library physical access point and they are open a total of 515,480 hours annually, providing physical access levels well beyond any other service. And they provide 384,384 hours of virtual access. They are well-known in the community, even amongst non-users. They are used by over half the State’s total population. They hold an enormous resource base of over 9 million items and they offer a diversity of services responsive to the particular needs of their communities. In short, the public library network has developed substantial community building capability over the last fifty years or so, its various well-located buildings and mobile services provide a safe and non-threatening environment which is open outside normal business hours. There is

potential to expand the range of services that could be delivered from these existing facilities.

Challenges if public libraries are to realise their community building potential

However, it was well understood by those who participated in the Libraries Building Communities project that a number of challenges must be faced if public libraries are to take on an enhanced community building role. These are challenges familiar to public library managers all over the world. The research concluded that the way in which public libraries are funded needs to be completely re-assessed in light of the many new roles they have taken on in recent years. Despite a recent building program subsidised by the State Government, many Victorian public library buildings date from the 1960's and '70's and need to be upgraded so that they remain a welcoming presence in the community and to support new roles. During the late 1990's the Victorian State Government also invested significantly in providing Internet access to the community through all Victorian public libraries. Victorian public libraries provide the best public library Internet access in Australia, yet the Libraries Building Communities research shows that more Internet terminals are needed to ensure that libraries remain relevant, contemporary services that meet the ongoing needs of learning communities. The research also recognises that the public library workforce must have the necessary skills in the use of new technology and in many other new areas of service. Skilling of the workforce was seen as a major challenge. Finally, if public libraries are to fulfill their community building potential they must strive to forge stronger partnerships with other agencies that already have strong links within the community, such as employment agencies, neighbourhood houses, schools, youth programs and church groups. Benefits were also seen to arise from stronger links between public libraries and key decision makers in local councils.

The Libraries Building Communities reports conclude that 'These challenges cannot be tackled by public libraries alone. They require the cooperation of stakeholders from across the community, government and business. If managed effectively, public libraries offer benefits in terms of communities that are smarter and quicker at gaining and using information, more comfortable in the use of IT, have more educated and informed individuals who can contribute to a more successful society, have better social networks and are more tolerant of differences.'

Libraries Building Communities reports

There are four Libraries Building Communities reports and an Executive Summary. Report 1, Setting the Scene, provides the background to the project. It introduces the key concepts around community building, Victorian Government policy, the

Victorian public library network, similar national and international studies measuring the value of public libraries, the project objectives and the methodology. Report 2, Logging the Benefits, discusses who is using public libraries, the benefits of public libraries, the most important services offered and the future role of the public library. Report 3, Bridging the Gaps, provides information about who is not using public libraries and the barriers to use, identifies potential new users, and suggests strategies for enhancing their engagement. Report 4, Showcasing the Best, provides 34 case studies of exemplary and innovative Victorian public library programs and activities that illustrate the many ways in which public libraries strengthen their communities.

Next steps for the Libraries Building Communities project

Since publication of the Libraries Building Communities reports in February this year, they have been widely distributed and spoken about within Victoria and nationally. Many public libraries have used the reports in their business planning and budget submissions. The Victorian Minister for Local Government has indicated that the State Government will fund a statewide public library initiative coming out of the research that will increase public library engagement with vulnerable members of the community who are not currently public library users. The Department for Victorian Communities provides State Government funding to public libraries and conducts the statistical survey. It has agreed to partner with the State Library and public libraries to develop the online survey into an instrument that can be rolled-out annually with a view to creating some new and more relevant performance indicators for public libraries. The State Library will conduct further in-depth research with community groups who are not currently using public libraries to create guidelines for increasing their engagement. It will also provide seed funding for a range of partnership initiatives in individual library services to increase their community engagement. The Libraries Building Communities project is evolving and its impact will be felt on Victorian public library service delivery for many years to come.

Nobody speaks better for the Libraries Building Communities project than the participants themselves, so it is appropriate to conclude where this paper began, with some of the views about public libraries gathered from the participants:

Knowledge and information are empowering communities to better themselves and our libraries are central for people who have a language, other than English, as their main language

Library – it’s one thing the whole family can do together

The library is an ‘alive’ place for people to interact – not just for collection users, but for the wider community

When I wasn’t working I would say it saved my sanity

Abstract

Libraries Building Communities is a research project that evaluates the contribution of public libraries to community strengthening in the Australian State of Victoria and provides recommendations that will help drive the strategic direction of the State’s public library services for the next several years. Victoria has a population of approximately 5 million people. It has 43 public library services and a network of 238 branch libraries and 30 mobile libraries.

Although developed with an awareness of other research that has been conducted in this area globally, the Libraries Building Communities project is groundbreaking in its scale and complexity.

The aims of the *Libraries Building Communities* research are: to increase community awareness of the range of public library services, particularly for ‘disadvantaged’ groups such as ethnic minorities, and those living in remote areas; and show government at all levels how public libraries can help achieve their policy goals. For public library staff the project:

- presents clear new data on the contribution libraries make to their communities;
- provides case studies that show how Victorian public libraries lead in innovation;
- identifies groups that are not currently well served by their libraries, and offer solutions;
- builds awareness of the critical social capital and community building role of public libraries.

Information was gathered from: 8,600 online surveys; 400 telephone interviews with library users and non-users; 35 in depth face-to-face interviews with key influencers in the community; and 24 focus groups with library users, non-users and staff. public libraries.

The *Libraries Building Communities* findings are presented in a series of reports.

This article presents an overview of Libraries Building Communities. It will cover the background and aims of the project, methodology, key findings and recommendations, and lessons learnt during the three-year process of carrying out the project, from the original research proposal in April 2002 to publication of the research reports in March 2005.



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