

 <p>The logo for WLIC 2007 Durban features a stylized map of Africa in white on a blue background, with vertical stripes of red, green, and yellow to its right. Below this is the acronym 'WLIC' in large white letters on a black background, with the year '2007' written vertically to its right. At the bottom, the word 'Durban' is written in a stylized font where each letter is contained within a black banner-like shape.</p>	<p style="text-align: right;">Date : 04/06/2007</p> <p>Culture, Capability and Character in Applying Evidence to Service Enhancement and Development: an Exploration.</p> <p>Dr. J. Eric Davies. Formerly Director, and now Consulting Senior Research Fellow LISU, Loughborough University, Loughborough, Leics. LE11 3TU England Tel +44 (0)1509 635681 Fax +44(0)1509 635689 j.e.davies@lboro.ac.uk</p>
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Introduction

The modern library manager regularly faces an array of challenges that demand a range of knowledge, skills and attitudes in the endeavour to deliver services of quality within finite (and sometimes very limited) resources in an ever changing environment. To maintain the momentum, managers have to apply a whole range of tools and techniques to the situation. Among these is the application of an assortment of internally and externally generated performance related data, together with output from empirical research studies, in what may be described as evidence based management practice.

The development of an evidence based practice approach may, to some extent, be viewed as a response to several factors. They include: the need to check the alignment of service delivery with strategic direction, the need to maintain focus whilst initiating and responding to change, the imperative to work optimally and maximize impact through best practice and the requirement to demonstrate, as well as secure recognition for, the value of a service, especially in the eyes of those that pay for it. The substance of this paper looks beyond the detailed mechanics of evidence based management to explore the organisational and personal dimensions of this way of working and the issues of culture, capability and character that are raised. Along the way it will consider the relationship between the objectives and methods of managing libraries, touch upon the various kinds of evidence that may be used, and

reflect upon selected examples of evidence gathering undertaken by LISU, a research unit base at Loughborough University in the UK.

Managing in an Changing Environment

John Harvey-Jones, the management authority, asserts in his book *Making It Happen* that –

‘Management in particular is not about the preservation of the status quo, it is about maintaining the highest rate of change that the organization and the people within it can stand.’ [1]

Before contemplating why and how change happens it is first worth reflecting on some of the basic issues regarding why and how libraries are managed.

For the mainstream of libraries, a basic series of strategic core objectives may be regarded as the provision (generally, free at point of use) of:

- Access to information and materials through a range of media products which may be conventional and/or electronic; collection based and/or virtual and networked
- Space and an appropriate ambience for consultation, study and cultural exchange
- Services relevant to information deployment and delivery, as well as advice and support in using information materials and equipment.

These combine to create opportunity and stimulus for creativity, problem solving and cultural enrichment within a community, or a corporation.

Coupled with these is a series of key priorities, which demand a great deal of sound management supported in many cases by an evidence base. They include:

- Managing economically
- Managing efficiently
- Managing effectively
- Undertaking advocacy through demonstrating added value
- Fulfilling accountability
- Developing services

In meeting these core objectives and key priorities managers are engaged in a variety of functions that draw extensively on their skills, knowledge, experience and creativity. They include: planning, prioritising, organising, deploying, delegating, maintaining, monitoring, communicating, motivating, mentoring and leading.

As if operating on shifting sands, libraries, in keeping with many other agencies, are operating in times of great change. Moreover, much of the change is influenced by factors well beyond the manager’s control. They include such factors as technology, people, and society in general.

Developments in digital technology provide systems that not only streamline routine operations, but also open up new dimensions of accessibility to information through networks that extend the reach of the library far beyond its walls. The pace of some of these developments is such that the model of information delivery, for example,

displays a certain volatility (or even instability) which taxes the library manager's capacity to plan effectively.

The need to be informed has a new urgency for people embedded in the global knowledge economy, and their information needs have become more extensive to meet the demands of working, learning and living. In many cases, they have become more discriminating and demanding users of library services and their expectations are high. These expectations are translated into the need to offer quality services and support that compare with competing alternatives such as bookshops and the internet. In addition, the volume of information and the relative complexity of access modes place great demands on the capacity and flexibility of library support services.

Society, as a general descriptor for governments, international organisations and agencies, has also created a changed and more demanding working environment for the manager. Acting on behalf of society, such agencies can influence the manager's scope to operate through the policies, initiatives, legislation and regulations that are introduced. In public services there has been an increasing emphasis on accountability, transparency and offering [and demonstrating] value for money. In addition, the library has been identified as a vehicle for social development and there are many examples of government initiatives to achieve social goals. Thus evidence is needed to underpin good management, assess performance against social goals and to support advocacy for resources. In addition, the corporate sector has also come under closer social scrutiny in terms of financial probity and governance as well as corporate responsibility that embraces environmental and social dimensions. All this has added to the information that needs to be assembled and presented.

Faced with all these changes, one can draw inspiration, or, at least comfort, regarding the inevitability of having to adjust to change from Machiavelli, who also reminds us of the penalty of not doing so:-

'I believe also that he will be successful who directs his actions according to the spirit of the times, and that he whose actions do not accord with the times will not be successful.' [2]

Evidence Based Practice

The value of assembling and exploiting a range of evidence to meet the challenges identified earlier is clear. There is an extensive catalogue of appropriate evidence and methodologies that can be applied to meeting the challenges and demands of managing a modern service. Several useful references go into the detail. [3] [4] [5] [6] [7] [8] Only a brief outline is offered here.

It is convenient to view evidence as being of two principal types:

- Performance Evidence
- and
- Research Evidence

They may be regarded in many cases as complementary and may not always be as distinct as they have been portrayed here for the purpose of the discussion.

Performance Evidence

Performance evidence encompasses the data relating primarily to the operational aspects of a library service and may be quantitative, or qualitative. A simplified listing will include:

- Inputs (what is put in to the service such as spending on information materials, or staff)
- Outputs (what is directly derived from the service such as items consulted, loaned, or downloaded)
- Outcomes (the benefits resulting from the interaction between user and service, such as improved individual performance, or increased level of use for the library)
- Impact, or effectiveness (the higher order influences that the library service has on the community or organisation, such as the contribution to growth in a commercial organisation, the support for learning and research in an educational context or, in the case of a public library, the influence on social and cultural life as well as to economic prosperity).

As one moves down through the spectrum of performance evidence two things become apparent. Firstly, the evidence for managing, particularly at a strategic level, becomes more useful, and secondly, almost perversely, the complexity (and cost) of gathering reliable and suitable evidence increases.

Another important dimension is the service domain, or the operational context for the library service. This macro-level data describes the nature of the community served such as the numbers and categories of students, administrators and academic staff in an educational institution, the membership of the various functional divisions, such as research and marketing in a business firm, or the composition of the local community for a public library. To these metrics can be added some description of the information environment in which the library is operating including the nature of the information media and the principal modes of communicating.

Since the users are at the heart of the library service, evidence regarding their behaviour, attitudes and perceptions regarding the service are immensely important in managing effectively. Neither should the information about lapsed users and non-users (or potential users) be discounted; it is important to learn why they are not using the library in order to plan appropriately.

Research Evidence

Research evidence comprises the results of empirical studies that illuminate the broader outcomes of service provision, providing insight for decision making, or identifying options and solutions for service refinement and development. By this means, managers draw upon published accounts of external research studies to inform their own policy and practices. A wide range of research evidence can be used provided it is reliable, valid and appropriate to the situation in terms of scope and methodology. It may also be appropriate to conduct in-house research to explore options for service development. As long as the work is conducted with sufficient rigour, it may be argued that such evidence will be applicable and useful. Many very worthwhile studies remain unpublished and therefore unused beyond their immediate boundaries. Peer reviewing offers a yardstick by which to assure quality.

The whole approach derives from the highly formalised evidence-based methodology developed in medicine and health care that is becoming an established success. In contrast with health care, however, it may be argued that the research knowledge base in library and information management is still being developed to the stage where it can be regarded as fully useful in terms of scope and reliability.

Organisational and personal Issues

This extensive portfolio of tools and data, outlined above, can only truly be of value if the commensurate personal and organisational qualities to use it reside within an organisation at all levels. Put briefly, successful application of evidence based practice relies on culture, capability and character. These issues are further discussed below.

Culture

The evidence based approach needs to permeate the whole organisation if it is truly to be useful as a tool for managing service enhancement. It should not simply be the preserve of senior managers. There is a great deal to be gained in encouraging all tiers involved in running the library service to embrace the idea of applying evidence.

Some of the positive benefits include the following:

- It creates a more stimulating working environment for staff, within which to deliver services.
- It provides a framework within which local service adjustments and new initiatives are more easily planned and evaluated.
- Service inconsistencies and variations become more easily identifiable and responded to at local level.
- There is a greater awareness of the importance of gathering reliable and consistent performance evidence at local level.
- Staff are alert to the value of identifying significant new performance evidence at local level – for example case studies and anecdotal evidence.
- The centre is better informed regarding overall service performance.
- The periphery is better informed regarding central objectives and how local activity fits in.
- It helps strengthen the commitment to providing optimal service quality.
- The library user is better understood and supported.

Fostering an evidence culture may pose its own management challenges; but it may make the task of leadership more rewarding. It takes investment in time and effort to inculcate a culture within an organisation so as to arrive at a situation where ‘think evidence’ is a byword, but it can be achieved. Moreover, it does not signal the abdication of responsibility for determining the direction and ensuring the quality of the service on the part of senior management.

It remains important to maintain a realistic perspective on the quantity and quality of evidence that is needed. Clear organisational guidelines, templates and tools to structure evidence gathering and use, as well as sound training in the approach, are necessary. Devising strategies and mechanisms for sharing evidence within a large

organisation are also vitally important. The approach must be embedded within an organisational culture that values evidence and understands how it can be used.

Capability

For the evidence based approach to work the capability for applying it must either reside, or be developed within the organisation. This capability comprises a combination of skills, knowledge and attitudes that enable staff to act with confidence. Key attributes required for a successful evidence based approach include the capability to:

- Identify which aspects of a service are appropriate to be evaluated through evidence.
- Identify which service factors best lend themselves to development through evidence.
- Identify what counts as relevant and reliable evidence, and to judge the extent to which it needs to be relevant and reliable, (for example, in the case of numeric data, how precise they have to be; in the case of research evidence, how many studies are needed to make outcomes meaningful).
- Devise means for acquiring or collecting relevant and reliable evidence.
- Evaluate, analyse and interpret evidence.
- Determine action based upon a sifting of the evidence.
- Communicate evidence and the actions based upon it clearly to others.

It follows from this catalogue of requirements that evidence based practice places demands on people's capacity to analyse aspects of a service in some depth and on their skills as discriminating users of evidence. Firstly, they must be able to exercise judgement to ensure that the right issues are addressed and that the right questions are being asked. They need knowledge of the various techniques for describing and evaluating services, including statistical methods and surveys. This includes having an awareness of the limitations of particular methods in certain circumstances. They also need to be able to identify, retrieve and evaluate relevant published research accounts. A certain level of numeracy is called for in understanding internally collected and generated data as well as the results available in external research reports. This extends, for example, to being able to judge the validity of data on the basis of how they were gathered. The ability to present evidence clearly and convincingly to a range of colleagues and other stakeholders is also an important skill if others are to be persuaded of the suitability of a chosen course of action and of the benefits of using evidence.

Character

The character of an organisation is moulded through its leadership and the values and ethical standards that it exhibits. The inspiration needed can often be found in an organisation's statements of mission and vision, topics that have been explored elsewhere by the author. [9] Evidence based practice requires the individual and the organisation to display character through a strict adherence to professional standards of integrity. Thus, it is important that evidence is used honestly and that data is acquired and presented in as transparent a fashion as possible. Moreover, there is scope for reflection on what the evidence reveals. There needs to be an acceptance

that evidence will sometimes highlight limitations and shortcomings in a service. The intelligent response is to learn from the information in order to develop a better service. A willingness to accept and adapt to change is an imperative that is not easily achieved as the service moves into uncharted territory. Evidence, if it is intelligently used and combined with clear aims and objectives, can make the journey less uncertain.

Some Examples

In the United Kingdom, LISU has a history of supporting managers in achieving evidence based practice through its regular statistical reports series, specialist studies, workshops, consultancy and research projects. It operates as a national research and information centre based in the Research School of Informatics and the Department of Information Science at Loughborough University. It has an established reputation as an independent authority in its field of analysis, development, interpretation and dissemination of statistics, performance assessment measures and related management data. Some examples of how it contributes to evidence based practice are briefly noted below.

Evidence Based Management in Action Project

This project, based on a large county library system and undertaken over a three year period, exemplifies how the investment in analysis, support and training can pay dividends in developing an evidence based culture that permeates an organization. Researchers from LISU worked with staff in the library system to improve service delivery by developing performance evaluation tools and skills, and furthering an evidence based management culture. The aims of the project may be summarised as:

- To analyse the library's current approaches to planning services, setting and achieving targets and performance evaluation.
- To involve all levels of library staff.
- The identification of suitable evidence to support management decisions.
- To promote a culture where effective performance measurement is valued as a vital management tool.
- The introduction (by LISU) of informed practical solutions to provide a sustainable evidence-base.
- The development of skills (for library staff) through training..

The project involved an extensive activity mapping exercise within the library system followed by the identification and appraisal of the evidence being used. The information was gathered by LISU consultants through desk research, field work and a series of fact finding seminars. A further stage led to the determination of a refined body of evidence that could be usefully applied. A detailed statistical evaluation in the form of a 'health check' was also undertaken by LISU statisticians. At the same time, a series of workshops was organized for staff to develop skills and knowledge about using performance evidence. During the course of the project a Performance Management Officer was appointed by the library system, thus testifying to the commitment of senior managers, and the local authority, to the endeavour. The success of the project can be judged on several counts. There was a high level of enthusiasm for the evidence based approach throughout the service. Several examples were identified where managers were using a greater range of evidence for local decision making. Moreover, the library system improved its performance significantly

over the period as a comparison against national standards revealed. The project had its own websiteⁱ and was fully documented. [10] [11] [12] [13]

International Bibliography of the Social Sciences User Survey

This study was undertaken on behalf of the UK Social Sciences Research Council in 2004 to provide supporting evidence for a mid-term review of the publication and its management. A survey of a wide range of IBSS users was undertaken using an online questionnaire. In addition, a small number of 'hands on' sessions with novice users of IBSS were run at a selection of UK Universities to provide information on search strategies and usability of the database. These comprised a series of exercises through which the novice users worked, followed by a plenary discussion on the features of the bibliography. The project gathered useful evidence regarding the value and utility of the publication by providing statistics on the use of IBSS by a range of users, and recommendations for future improvements to its presentation and content. A summary of methodology and results has been published. [14]

Journals Pricing Analysis

Two major studies have been undertaken on trends in scholarly journal prices and related factors by LISU. Both were sponsored by Oxford Journals, a division of Oxford University Press. The first study, conducted in 2004, analysed data relating to the output of twelve scholarly journal publishers over the period 2000 to 2004, together with data for 1993 data as a base year for comparison. General analysis was carried out on around 6000 journals spanning all subject areas. In addition more detailed analysis focused on biomedical titles.

The second follow-up study updated and extended the work carried out in 2004. Data relating to the published output eleven publishers were analysed generally. More detailed analysis was undertaken on biomedical and social science journals. The findings provide useful evidence to support decision making, not only for librarians, but also for the publishing industry and the academic community generally. Reports describing both studies are available. [15] [16]

Trends in Scholarly Communications: Output, Access and Use Issues

This project, undertaken for the Joint Information Systems Committee (JISC), examined the prevalent modes of scholarly communication, both formal and informal, taking place in the scholarly community in the UK. The study featured an extensive literature review and an analysis of published data. This was supplemented by evidence gathered through e-mail questionnaires and interviews with a selection of leading librarians, academics and publishers. The findings contributed to a better understanding of the diversity of methods through which scholarly communication is achieved. The full report is available on the JISC website, and a summary has also been published. [17] [18]

Library Portals Studies

Three linked studies involving LISU research focused on the development, management and use of library portals as tools for enhancing access to information sources. They were all sponsored by the JISC and were designed to provide a

ⁱ <http://www.lboro.ac.uk/departments/dis/lisu/lancs/home.html>

comprehensive overview of current practice and future prospects in academic library portals.

The first study, conducted in 2003, was a national review of the extent of provision of both locally developed, as well as commercial library portals in further and higher education libraries. This was followed by a case study that focused on the introduction, implementation and use of a library portal in a particular library; in this instance, *Metalib* in the library at Loughborough University. The third study featured five further case studies and entailed a detailed analysis of policy and practice relating to the implementation and maintenance of library portals. An assessment was made of the impact that a portal has on the use of library resources, as well as any implications for staffing and skill requirements. These three studies assembled and disseminated evidence that enabled the community to understand the development, implementation and use of library portals by institutions in higher and further education, and plan for the future. The studies had a dedicated website.ⁱⁱ The reports are available on the web. [19] [20] [21]

Average Prices of British and USA Academic Books

Two established series from LISU provide price data for academic books; one covering UK imprints and the other titles published in the USA. Each is published half-yearly in February and August and gives a detailed analysis of average prices by 64 separate subject category and trends in broad subject areas using data on publishers' recommended retail prices derived from over 12,000 UK and over 30,000 US titles supplied by Blackwell's Book Services. Since 2003, the reports have been available on CD-Rom as well as print. Each CD-ROM contains the full publication as a pdf file, together with the detailed data tables as Excel workbooks. The data provide essential evidence to aid budget preparation for academic and special librarians. Details of the most recent reports are noted. [22] [23]

Conclusion

Evidence based management practice offers a clear way forward for managers striving to achieve the best performance under demanding and changing circumstances. On a general level, much remains to be done in spreading the evidence based practice message and especially in equipping people to apply the approach successfully. In addition, new ideas continue to emerge regarding the assessment of performance and the improvement of services and it is important that these are assimilated in to the mainstream of management thinking. This paper has highlighted some important facets of the topic.

References

- [1] Harvey-Jones, J. *Making it happen: Reflections on leadership*. London, Collins, 1988.
- [2] Machiavelli, N. *The Prince*. London, Dent, 1908.
- [3] Booth, A. and Brice, A. (Editors) *Evidence Based Practice for Information Professionals: A handbook*. London, Facet Publishing, 2004.

ⁱⁱ http://www.lboro.ac.uk/departments/dis/lisu/pages/projects/libportals_project.html

- [4] Davies, J. E. and Creaser, C. Taking a Measured Approach to Library Management: Performance Evidence Applications and Culture. (In: *Management, Marketing and Promotion of Library Services Based on Statistics, Analyses and Evaluation*, ed. T.K.Flaten. Munich, K.G.Saur, 2006. IFLA Publications Series 120/121. pp17-32)
- [5] Hemon, P. and H. Altman. *Assessing service quality: satisfying the expectations of library customers*. Chicago, ALA, 1998.
- [6] King Research Ltd. *Keys to success: Performance indicators for public libraries: A manual of measures and indicators* London, HMSO, 1990.
- [7] Lancaster, F. W. *If you want to evaluate your library* [2nd ed] London, Library Association, 1993.
- [8] VanHouse, N. A., B.T.,Weil, and C.R.McClure. *Measuring academic library performance: A practical approach*. Chicago, ALA, 1990.
- [9] Davies, J. E. Meaningful missions, valid visions and virtuous values: An exploration. (In: Proceedings of the 72nd IFLA General Conference and Council, August 2006, Seoul - *Libraries: Dynamic Engines for the Knowledge and Information Society*. The Hague, IFLA, 2006.)
<http://www.ifla.org/IV/ifla72/papers/133-Davies-en.pdf>
- [10] LISU. *Evidence Based Management in Action: Lancashire County Library and Information Service – LISU. A Partnership in Developing Advanced Performance Evaluation of Service Delivery: Report for End of Year 1*.Loughborough, LISU, 2003.
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/lancs-pdfs/ebm-report-yr1.pdf>
- [11] LISU. *Evidence Based Management in Action: Lancashire County Library and Information Service – LISU. A Partnership in Developing Advanced Performance Evaluation of Service Delivery: Report for End of Year 2*.Loughborough, LISU, 2004.
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/lancs-pdfs/ebm-report-yr2.pdf>
- [12] Greenwood, H., Hamblin, Y., and Creaser C. *Evidence Based Management in Action: Year 3 Report*. Loughborough, LISU, 2005.
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/lancs-pdfs/ebm-report-yr3.pdf>
- [13] Hamblin, Y. When evidence proves the case. *Public Library Journal*, vol. 18, no.3, June 2003. pp. 69-70.
- [14] Lockyer, S., Creaser, C., and Davies, J. E. Assessing the IBSS database from a novice user perspective. *The Electronic Library*. vol. 24 , no.5. 2006, pp.590-607.
- [15] White, S., and Creaser, C. Scholarly Journal Prices: Selected Trends and Comparisons October 2004. Loughborough, LISU, 2004.
(LISU Occasional Paper no. 34)
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/op34.pdf>
- [16] White, S., and Creaser, C. Trends in Scholarly Journal Prices 2000-2006.Loughborough, LISU, 2007. (LISU Occasional Paper no. 37)
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/op37.pdf>
- [17] LISU. *Trends in Scholarly Communication: Output, Access and Use Issue: Report to JISC...* Loughborough, LISU, 2002.
http://www.jisc.ac.uk/uploaded_documents/lisu.pdf
- [18] Davies, J. E. and H. R. Greenwood. Scholarly communication trends – voices from the vortex: A summary of specialist opinion. *Learned Publishing* vol. 17, 2004. pp. 157 –167.
- [19] LISU. *LibPortal Project: Access to Library Provided Resources - A Survey and Review of Library-orientated Portals in Higher and Further Education*. Loughborough, LISU, 2004.

http://www.lboro.ac.uk/departments/dis/lisu/downloads/LibPortal_final_report.pdf

[20] Hamblin, Y., and Stubbings, R. *The Implementation of MetaLib and SFX at Loughborough University Library: A Case Study*. Loughborough, LISU, 2003.

<http://www.lboro.ac.uk/departments/dis/lisu/downloads/Metalibcasestudy.pdf>

[21] Hamblin, Y. LibPortal Project: Case Studies of Portal Implementation in Higher Education Libraries – a report to the Joint Information Systems Committee. Loughborough, LISU, 2004.

<http://www.lboro.ac.uk/departments/dis/lisu/downloads/Lib%20Portal%20Case%20Studies%20in%20HE.pdf>

[22] LISU .Average Prices of British Academic Books July to December 2006 - Report no. 40 Loughborough, LISU, 2007.

[23] LISU.Average Prices of USA Academic Books July to December 2006 - Report no. 40 Loughborough, LISU, 2007.