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**Migrating LIS Professionals into Knowledge Management Roles:  
What are the Major Barriers?**

**Abstract:**

Knowledge management (KM) is a multi-dimensional field of study and practice, which requires a wide range of capabilities amongst its contributors, who come from a variety of professional groups. This paper examines claims that the Library and Information Services (LIS) profession should make and, indeed, is making a significant contribution to organizational knowledge management. It outlines KM knowledge and skills and reviews the major barriers to LIS engagement in KM: the profession's focus on external information resources, as distinct from internal organizational knowledge assets; lack of business knowledge; content ignorance; an image problem; a name problem; lack of visibility in the corporate environment; personality issues; and relative lack of the required management skills. The paper concludes with some suggested directions for LIS practitioners, educators and researchers.

In an increasingly competitive global economy many have come to see knowledge and information as the most important assets organizations possess, and to believe that they play a central role in organizational success and, indeed, survival (see, for instance, Bassi 1999; Drucker 1993). As a consequence, it becomes critical to manage these assets, provide the organization with high-quality information/knowledge and help members of the organization to overcome, what often turns out to be, information overload. The introduction of knowledge management (KM) in the early 1990s was an important step towards these goals. KM is very much here to stay, a point noted, for instance, in the conclusion of KPMG's *European Knowledge Management Survey 2002/2003*, which states that "The majority of respondents indicate knowledge as a strategic asset. ... Knowledge management is becoming explicitly linked with the capturing of missed business opportunities" (KPMG Knowledge Advisory Services 2003).

Much of the KM literature is aimed at the business sector but KM is equally applicable in the not-for-profit sector, including higher education. As Donald M. Norris et al. argue, "knowledge sharing – if it sparks innovation, changes in organizational dynamics, and new sources of value – can also make the difference in academia and e-learning" (2003, p.16). Underlying KM principles is the earlier theory of the "learning organization", which "encourage[s] people to grow and develop, to share their knowledge and learning with others, and to learn from errors" (Debowski 2006, p.21), ensuring that it is adaptive and dynamic. In recent years there has been an increasing realization that, although universities are in the business of teaching and learning, they are not necessarily "learning organizations". Like any business, however, they need to adapt to their changing environment. G.M. Steyn refers, for instance, to the "pressure on institutions to adopt different teaching and learning strategies" as they focus on "the production of learners who are skilled in lifelong learning and who take responsibility for their own learning". The "real challenge", according to Steyn, is "to meet the needs of the employees who are also learners as well as employers who are also developers and users of the high level knowledge incorporated and generated by the work-based programme" (2004, pp.621, 624).

The university library is one of the significant partners in the development of a knowledge sharing culture and the creation of KM strategies and practices. Its contribution includes transfer of information organization skills to the management of internal information, such as intranet design and portal development, and the application of information literacy skills (Dewe 2005). The Library and Information Science (LIS) profession, within and outside the higher education sector, has put forward a strong case for the relevance of its skills to KM activities (Martin, Hazeri & Sarrafzadeh 2006; Koenig 2005; Broadbent 1998; Church 2004; Corral 1998; Abell 2001; Ajiferuke 2003; Loughridge 1999; McGown 2000; Shanhong 2000; Koina 2003; Pantry & Griffiths 2003; Rowley 2003; Sinotte 2004; Ferguson 2004; Henczel 2004). There is widespread agreement from within the profession that, since information management is at the heart of every KM program, LIS professionals need to actively engage with them. It is especially worth noting the 2004 collection published by the International Federation of Library Associations (IFLA) with the provocative title, *Knowledge Management: Libraries and Librarians Taking up the Challenge*, and the especially challenging introduction by Hans-Christoph Hobohm, which claims that KM is one of those concepts that librarians take time to assimilate, only to reflect ultimately "on why other communities try to colonise our domains" (2004, p.7). Professional interest in KM is also reflected in monograph publications such as the practical text by Sylvia Webb (1998) and the edited collection by Kanti T. Srikantiah and Michael Koenig (2004), both of which map out the KM domain for information professionals.

A body of literature has emerged that explicitly addresses the opportunities for librarians within the context of KM (Rooi & Snyman 2006). Content analysis of

the literature has led to the identification of five broad roles for librarians in KM: facilitating an environment conducive to knowledge sharing; managing the corporate memory; transfer of information management and related skills to a new context that is linked to business processes and core operations; development of corporate information literacy; and finally, management of information in a digital/electronic environment (2006).

Although it is not widely held outside the profession that LIS skills are highly relevant to KM, such a view has been articulated. At an "Information Online" conference in Australia, for instance, one of the keynote speakers, a non-librarian, encouraged librarians to transfer their information management skills into the KM domain (Andrews 2005), although it should be added that she was speaking to an audience that consisted largely of librarians. Robert Schwarzwald, writing from an IT perspective, however, does outline some of the benefits of including librarians as KM players, such as their commitment to sharing information (unlike many people in organizations), their effectiveness, their customer-oriented attitude and their awareness of the ways in which people communicate information needs and of patterns of information use. Indeed, librarians determine success by the way in which people use a system, not according to the way they *could* use one if only they did things the way the system designers intended – a point of contrast, it is suggested, with the information systems and technology community (1999). The idea that LIS skills are relevant to KM is not widely held, however, a point suggested by a South African survey that referred to a divided view on KM, with "Those with an information technology perspective of information management [believing] that knowledge management is totally new" (Snyman 2001, p.274).

There is some evidence that KM has extended the job market of LIS professionals beyond traditional libraries and information centers. The results of a survey released through two IFLA mailing lists during May to July 2005 showed that 7.39% of LIS professionals had KM related jobs. Research by Lai (2005) shows that 18.5 percent of all KM job postings asked for an advanced degree of library/information science. A recent survey of newspaper advertisements in Australia suggested similar percentages to Lai's, however, the researchers reached different conclusions. Their preliminary findings were based on a survey of Australian newspapers for the first few months of 2005 (to June), which found twenty-one positions with the word "knowledge" in the position title (a relatively small number, given that most of the major Australian newspapers were surveyed). The percentage of KM advertisements that required LIS skills might suggest demand in the KM market for LIS professionals. In order to establish the relevance of LIS skills with those in this market, however, the researchers compared the knowledge, skills and attitudes required or desired for each position with the core LIS professional attributes listed by the Australian Library and Information Association (ALIA) on its website (2003) or identified by ALIA as "generic" attributes that LIS professionals share with other professionals or as neither. The degree of association between "ALIA" and "non-ALIA" attributes in the advertisements was found to be low. Five of the twenty-one advertisements could be clearly identified as relating to "LIS" jobs, with little or no attributes outside of the ALIA lists, with the other sixteen jobs requiring many "non-ALIA" attributes, with few attributes represented on ALIA's list of core LIS qualities. (Ferguson et al. 2005,). In other words, there may be distinct and even discrete KM job markets, with little or no significant migration of LIS professionals into (non-library) KM roles.

Some of the research over the past few years does, indeed, suggest that LIS professionals appear to have had little involvement in organization-wide KM activities and have not seized the new opportunities that KM presents. Research by Charlotte Breen and her colleagues (2002) suggests that many of the jobs taken up by non-LIS graduates were compatible with the skill set of LIS

graduates (see below) but that there is a perception that information professionals are not on the radar screen of business employers when they are employing knowledge managers. Sheila Corral (1998) claims that the core skills of library and information professionals are both relevant and essential to effective knowledge management but are often under-utilized and under-valued. Surely it is our job, she suggests, to put this right. More recently, Nerida Hart, a librarian who is the knowledge leader of FaCSIA, said of librarians: "The level of interest in what we do is virtually nil. Smart library managers are able to take the money and re-use it for practices that match the department's managerial philosophy"(2006).

In summary, KM has presented an exciting challenge to LIS professionals. Their skills are regarded by some as highly relevant and they could provide useful input into what has turned out to be a multi-disciplinary approach to KM development in organizations, but, as Doug Church (2004) points out, this is an opportunity that requires a great deal of preparation and a new way of thinking. Research suggests that there are significant barriers to the engagement of LIS professionals in KM initiatives, and it is these barriers that this paper attempts to address. Before exploring the barriers to LIS involvement in KM, however, it would be worth outlining briefly the knowledge and skills required in the KM environment and establishing whether or not there is, in fact, a subset that LIS professionals could bring to KM in their organizations.

### **KM Knowledge and Skills**

A few years ago, TFPL conducted one of the most comprehensive and influential studies of KM skills and attributes to be undertaken in the LIS sector, "Underpinning Skills for Knowledge Management" (initiated by the UK's Library and Information Commission in 1998 and awarded to TFPL), based on interviews and consultations with five hundred international organizations. It found, amongst other things, "significant overlap between recognized management competencies and those required for successful knowledge practitioners". What is more, Angela Abell, the study's Project Director, points out (2000, p.35):

KM skills are essentially those most often associated with change and project management. The ability to influence attitudes, to work in complex organisations, cross boundaries, and navigate political waters is characteristic of KM players. Teams and communities are also common in KM approaches, making team-building skills, consensus development, and community understanding increasingly important.

Such skills require a degree of corporate engagement that has not necessarily been typical of the LIS profession, if much of the LIS literature on KM is to be believed. This is borne out by Abell's list of "KM enabling skills and competencies":

- Business process identification and analysis
- Understanding the knowledge process within the business process
- Understanding the value, context, and dynamics of knowledge and information
- Knowledge mapping and flows
- Change management
- Leveraging ICT to create KM enablers

- An understanding of support and facilitation of communities and teams
- Project management
- Information structuring and architecture
- Document and information management and work flows
- An understanding of information management principles
- An understanding of information technology opportunities (Ferguson & Hider 2006; extracted from Abell 2000, Figure 1, p.36).

Some might question whether LIS students are graduating with these skills and competencies but research by Charlotte Breen and her colleagues suggests that they do. Using the TPFL findings as their basis for skills requirements, they conducted surveys of LIS schools in Britain and Ireland, ten LIS graduates in Ireland and twenty companies, in order to establish “whether graduates with LIS training are perceived as having the requisite skills and personalities to perform as knowledge managers and information managers in the private sector” (Breen 2002, p.127). While this is not an ideal sample, the researchers were clear that “LIS graduates are being equipped with the requisite skills to organise online information and manage knowledge”, although they did note barriers to the employment of such graduates (2002, p.131), a point taken up in this paper.

Still in Britain, the Department of Information Science at Loughborough University built on the TPFL case studies with a survey of job advertisements then follow-up surveys of employers and recruitment agencies. This produced the following ranked list of required experience and skills:

1. Relevant industrial experience
2. Interpersonal skills
3. Highly developed oral/written communication skills
4. Project management skills
5. Team player
6. Change management
7. Analytical skills
8. Ability to work to strict deadlines/prioritisation skills
9. People management
10. Training skills
11. Negotiating skills (Morris 2004, p.120).

Included in the other skills, competencies and experience identified in the study were LIS/IM skills/experience and educational requirements that demonstrated some interest in information related degrees or LIS related subjects. Although practical KM experience and experience of using “KM development tools” were particularly important, Anne Morris states (2004, p.121) that “Many of the skills listed in the advertisements were LIS related”.

A few years ago, Standards Australia published “sample job descriptions” for the KM sector, based on Karen Bishop’s expertise as a recruitment consultant. Specific “knowledge-enabling” tasks performed by these positions included the following:

- knowledge strategies - to develop/improve the knowledge processes that support organisational development and performance;

- knowledge auditing - to develop maps of organisational knowledge, identify gaps in knowledge and barriers to knowledge discovery/exchange/development;
- 'information literacy' training programs for improved use of information and knowledge resources;
- facilitation skills for improved group dynamics, and coaching programs for improved communication skills to help with collaboration and innovation;
- designing systems and procedures to enable effective creation of, and access to, recorded knowledge; and
- managing changes in organisational behaviour in line with knowledge-focused organisational strategy (Bishop 2002, p.12).

In areas such as information literacy and provision of access to recorded knowledge, clearly LIS professionals have some expertise although not all would claim to be able to perform the full range of tasks (Ferguson 2004).

Perhaps one should distinguish between managing knowledge and being a knowledge manager, however, since the latter goes well beyond mere management of knowledge (however that may be defined) and involves effecting significant change in organizational culture – which is beyond the capabilities of most LIS professionals in term of organizational politics. It is bearing in mind that the TPFL study, discussed earlier, found that there was very little evidence of involvement of information professionals in KM implementation at a strategic level (Rehman & Chaudhry 2005).

Finally, in one of the most comprehensive studies of KM education, Nanyang Technological University, Singapore, undertook a survey of KM courses offered by universities in Australia, Canada, Singapore, the UK and the USA. It found differences of focus amongst the programs being offered, depending, not unexpectedly, on the department offering the course (whether a computing department, department of business studies or a school of information studies), but sufficient commonalities to come up with a broad listing of topics. Since initially reporting their findings in 2001 (Chaudhry & Higgins 2001), Abdus Sattar Chaudhry and Susan Higgins note little change in the orientation of courses and in a later paper (Chaudhry & Higgins 2004, p.132) they reproduce their listing of topics, organized under five broad headings:

1. Foundations (such as Knowledge Workers, Intellectual Capital and Sources of Knowledge)
2. Technology (which includes, for instance, KM Architecture and data analysis tools such as Business Intelligence)
3. Process or codification (including Knowledge Audit, and Search and Retrieval)
4. Applications (which include case studies and implementation)
5. Strategies (for instance, steps for sustaining KM work and measurement of knowledge assets).

A later survey of nine programs in Australia came up with a similar list of topics (Ferguson & Hider 2006).

Clearly the knowledge and skills required in the KM domain are considerable and much of the literature over the past few years warns of the need for a multi-disciplinary approach and for LIS professionals to forge partnerships with others in the field – not just other information professionals but also professionals in the areas of human resources, strategic management and customer relations (Todd

& Southon 2001, p.322; Al- Hawamdeh, Froehlich, Srikantaiah, Chaudhry., Chang & Morales-Arroyo 2004, p.605; Milne 2000, p.149)

### **Barriers to the Migration of LIS Professionals**

There is a general acknowledgement within the literature that although LIS professionals may have excellent information management skills, they need to gain additional skills and cross existing boundaries in order to become significant players in KM. The obstacles might be personal, organizational and/or professional; some may arise from the personal characteristics of LIS graduates and some from their inappropriate type of education. Abell and Oxbrow (2001) state that from the employer's point of view the specific obstacles are as follows:

- lack of business knowledge
- lack of understanding of the interplay between information and organizational objectives
- poor team and leadership skills
- lack of management skills.

According to TFPL (1999), a general focus on external information (rather than on internal information), lack of business understanding and lack of visibility of the discipline itself have resulted in hampering the impact of LIS skills in KM environments. Writing around the same time, Schwarzwalder (1999) claims that the major disadvantage of librarians as KM players is that they have little or no influence in terms of changing organizational culture. Librarians are poorly placed as change agents but, as already suggested, they can expand their influence by partnering with other groups within their organizations.

A review of the literature, establishes that for many commentators the principal barriers for LIS professionals are their:

- concern with external information resources rather than internal organizational knowledge assets
- lack of business knowledge
- content ignorance
- image problem
- name problem
- lack of visibility
- personality issues
- lack of the required management skills.

### **Concern with External Information Resources**

It has been claimed that librarians limit themselves to external, published information. In 1998, having conducted some case studies of KM in practice, Cooper reported that some of the former researchers were hesitant about involvement in the management of internal information, partly because in their professional education and previous experience they had concentrated on external sources of information and partly because involvement in the management of internal information was perceived to offer little of value in terms of their own career development (quoted in Loughridge 1999). The TFPL study mentioned earlier supported the view that librarians were more concerned with external information and to some extent the management of records and documents (1999). Tom Davenport and Lawrence Prusak (1993) went so far as to blame information professionals for preferring books to people, although the

comment is dated and may have lost some validity (if it had any). Writing from a higher educational perspective, Townley (2001) states that librarians do not manage knowledge about their organizations as they manage their other resources and claims that they have done little to use organizational information to create knowledge that could be used to improve the functionality of library and higher education processes.

These and many other commentators refer to librarians' strong focus on external sources of knowledge as a barrier to their fuller engagement with KM practice but, in sharp contrast, some research suggests that anything between eighty and ninety-five percent of the information used in an organization is generated *internally* – an important point for LIS professionals seeking to contribute to KM, according to Abell and Oxbrow (2001). Michael Koenig, however, sees this barrier beginning to crumble, arguing (2005) that KM is moving into a new stage of recognition for the importance and incorporation of information and knowledge external to the parent organization. Although the KM "mindset" for years has focused on organizations' internal information and knowledge assets, he claims that the "narrow emphasis of KM is now broadening", believing this "phenomenon" to be driven by the "extension of Intranet based KM systems to Extranet based systems", "Concern about the knowledge about to be lost as post war baby-boomers are beginning to hit retirement age" and a "repeat of the same broadening phenomenon that occurred with MIS, Management Information Systems".

According to Koenig, such information and knowledge has always been the province of the librarian and the information professional, and this apparent "broadening" of the KM domain presents obvious and important opportunities for the field of librarianship, particularly in the area of the organization's KM system design. If he is correct, LIS professionals need to take into account both external and internal knowledge sources, and learn to manage both forms of resource. It remains to be seen, however, whether he *is* correct. His paper cites nothing more recent than 2003 and the argument is a rather abstract one, especially the notion that the "broadening phenomenon that occurred with MIS" might act as a driver of current attitudes towards KM. Those in the LIS community who are interested in professional engagement with KM will no doubt watch with interest for more empirical evidence of a shift in "mindset" but until such a shift actually happens the continuing focus of the LIS profession on external information resources is likely to be seen as a significant barrier to its KM credentials.

### **Ignorance of Business Goals**

The second main point noted in this review is that KM is an integrated approach to the achievement of organizational goals and that the potential contribution of LIS professionals to KM initiatives might be inhibited by a general ignorance of business goals. Those working in the special libraries sector are accustomed to hearing and reading that their efforts need to become more closely aligned to business goals and practice, and many do indeed take pride in their level of corporate involvement. It is clear that such engagement is essential if LIS professionals are to have any impact on their organizations' KM. A study of KM job advertisements in Australia over a three month period in 2005, for instance, found that, while it was difficult to draw hard-and-fast distinctions between operational and strategic functions, a large percentage of the advertisements were strategically focused and required, amongst their leading attributes, a strong background in business analysis (Ferguson & Hider 2006). The TPFL study, mentioned earlier, however, found very little evidence of involvement of information professionals in KM implementation at a strategic level and suggested that the graduates of LIS schools "lacked business understanding" and "commitment to organizational goals" (Southon & Todd 2001; Rehman & Chaudhry 2005). In 2001, St. Claire, DiMattia and Oder addressed similar obstacles, including a lack of organizational and political understanding,

unwillingness to address issues of return on investment, insufficient understanding of business practices and limited access to high-level decision-making (quoted in Sinotte 2004).

There is nothing new about these claims. Davenport and Prusak in their paper (1993) call for information professionals to get out of the library and into the business, an exhortation that has been repeated many times. As already suggested, many in the profession, especially those working in special libraries, would argue that is precisely what they have been doing. Nonetheless, the view that LIS professionals need to engage more with core business persists. Doug Church suggests (2004) that information professionals should think in terms of benefits to their organizations. In a similar vein, Pearlstein claims that librarians need to “understand that they do not work in a vacuum, their library’s services must be tied directly to the corporate mission” (DiMattia & Oder 1997, p.33). Schwarzwalder (1999) states:

Unfortunately, many library efforts focus on projects with very little payback. Often these projects are focused on making the operation of the library more efficient. While this is a laudable goal, these efforts typically yield small incremental gains that are invisible to the customer base. Such efforts do little to convince sponsors that the library is capable of engineering--or even recognizing--worthwhile knowledge management applications.

As recently as 2001, Southon and Todd were blaming librarians for not considering overall goals in their activities. They state that: “[t]he focus was on the technical processes of gathering and organizing information to enable access, with little engagement with what is done with that information or the overall impact of the service on the organization” and that all LIS activities should be conducted in the light of overall organizational objectives. Davenport and Cronin (2000) found that much information science literature places KM essentially within traditional information science frameworks with little extension to the conceptual and organizational dimensions. As Butler puts it (2000, p.40):

Librarians have been actively involved in KM for many years – but in their libraries, not in relation to the organization as a whole. And herein lies the key. As previously outlined, KM is holistic. It affects the whole of the organization and most of its elements. Senior management in many public and private sector organizations, and therefore sometimes do not automatically think of involving their libraries in their knowledge initiatives. Because libraries tend not to be aligned with the goals of the business, they are still not viewed as integral to the business.

This is a point that LIS educators would do well to note.

### **Content Ignorance**

Linked to lack of business knowledge is the third main barrier identified here: content ignorance. Davenport & Prusak (1993) blame information professionals for their distance from the information content and usage of information. It is suggested that “librarians’ traditional reluctance to move beyond the information container towards analysis and interpretation of its contents has resulted in organizations overlooking their potential contribution, even in areas where their competence should be obvious. Information professionals are seen as service-oriented, but not value-oriented - they don’t understand the impact they can have on the business” (Corrall 1998). In 1996, Van House and Sutton stated: “the traditional focus of LIS has not been on information at all but rather on its containers - books, journals, maps and so on. It acquires, describes, stores and disseminates them without much concern for how their intellectual content is used” (quoted in Myburgh 2003). As Barlow (1994) put it so aptly: “We thought for

many years that we were in the wine business. In fact, we were in the bottling business. And we don't know a damned thing about wine.”

While these criticisms might suggest poor linkage between libraries and the overall goals of their parent organizations, they also highlight the potential contribution for libraries to leverage KM initiatives within their organizations, provided they see the implications of KM activities for the success of their parent organizations and start working to expand a more business-oriented perspective within the profession.

### **Image Problem**

The image problem facing some LIS professionals is a barrier to KM engagement that hardly needs laboring – the old stereotypes and reputation that attach themselves to the profession, including hair in buns, sensible shoes and the stern bespectacled, cardigan-clad “shushing” controller of books, do not encourage employers to employ LIS professionals at high levels of management. As Breen et al. (2002) state: “Few people, if asked to describe a librarian, would include the adjectives risk-taking or ambitious. Neither are librarians perceived as being creative”. Research a few years ago suggested that while LIS graduates are being equipped with the necessary skills, the image of “the librarian” was significantly impeding the entry of LIS graduates into the KM employment sector. Graduates with LIS skills need to market themselves more effectively in the IT workplace (Breen et al. 2002).

While LIS graduates may have many of the qualities required in a knowledge manager, a survey of companies in the business sector revealed that human resource managers do not think of LIS graduates when they recruit information specialists. Furthermore, even LIS departments do not perceive their graduates as “ambitious” or “risk-takers” or, in many cases, as having the requisite “business acumen”. There would seem to be a two-fold problem - the image of librarians and the perceived characteristics of candidates versus the desired ones (Breen et al. 2002). While librarians are still being taught the basic skills of classification and information organization, their common barrier to entering this employment field, it is suggested, is the stereotypical view of the librarian. There is an implication that the librarian's skill in creating order indicates a lack of creativity and a disinterest in how the information is used (2002).

One of the hopes is that, with developments in LIS education and in the range of professional and personal development undertaken by many in the profession, employers' perceptions may change (Abell & Oxbrow 2001). Such a change is suggested by Anne Morris's report (2004, p. 121), which refers to signs that employers' perceptions are changing, based on the increasing number of advertisements for KM positions stipulating the desirability of an LIS degree. Nonetheless, expectations on both sides still need to improve.

Numerous websites document attempts to change the old stereotypes under which librarians have suffered. “Progressive Librarian”, “The Shifted librarian”, “New Breed Librarian” and “Anarchist Librarian” are all examples of these efforts (Hillenbrand 2005)– although the last may not appeal to employers anxious to maximize management of their organization's intellectual assets.

### **Name Problem**

It is generally accepted that the external perception of the profession has greatly improved, but it still has a long way to go if the profession's qualifications and career paths are to be regarded in the same esteem as those of other professional groups, such as engineers, doctors, lawyers and so on. Closely linked to the problem of image is the name, librarian, which, although simple and functional, is seen to serve the profession as a whole rather poorly in the third millennium. “According to *The American Heritage Dictionary of the English Language*, a librarian is a person who is a specialist in library work”. Shamel (2002) asks whether that describes what all LIS professionals do. Terminology

does make a difference although Abell and Oxbrow (2001) suggest that the title librarian should not necessarily determine the role librarians play or how they are perceived. A title should not be constraining. They need to think in terms of what they can achieve rather than in terms of their nomenclature. To suggest, however, that position titles should not necessarily affect how librarians are perceived is a purely normative statement and does not reflect the realities of organizational politics.

### **Visibility**

This brings one to the issue of visibility. For years some commentators have reported a general lack of awareness among managers about the real contributions made by libraries and information centers. (see, for instance, Matarazzo & Connolly 1999). Shamel (2002) asks “Why do we not make ourselves known to these people? How can the *Harvard Business Review* write a book on knowledge management and not include the role of librarians? Who among us can reach the authors and publishers of such business books so that they carry our message to managers and decision-makers?”. This problem may stem from education. As Shamel puts it, “The business literature does not communicate the value of librarians and information management skills. The business schools do not teach the value of librarians and information managers along with the role of technology. It’s a wonder any business today employs any librarians at all...I interviewed the president of a pharmaceutical company which employs over 700 people. It has two drugs on the market, many more in the pipeline, and not one librarian.” (2002).

### **Personal Attributes**

Some commentators believe that one of the main barriers for LIS professionals to engagement in KM at a high level is their personal attributes, which are based in a specific educational culture. Sue Myburgh (2003, p2) believes that the most dangerous threat to the profession is the “librarian mindset”. In a key passage, Abell and Oxbrow (2001) put it this way:

People in senior positions were not born with an innate understanding of their industry or organization. They acquired it throughout their career, just as information professionals do - or do they? Is that the difference - that those reaching top management positions never saw any barriers to doing so? Their training as an accountant, engineer or HR professional didn’t somehow set them apart from the business of their organization. They expected that there would be opportunities for them and they were ready to take them.

How many information professionals set out with the same attitude, or are ready to look for opportunities to extend their experience and influence? How many expect that they could and should succeed at senior management level?

One could add, how many university librarians even attempt to move into promoted positions outside the library?

According to Davenport and Cano (1996), knowledge work is about the acquisition, creation, packaging, application or reuse of knowledge. They point to the need to take a process approach to knowledge work, maintaining, moreover, that people involved in KM initiatives typically showed attributes of ambition and risk taking. These are not, by general consensus, the characteristics of many people currently in the LIS profession (Davenport & Cano 1996). Another general criticism of LIS professionals is that they are reluctant and/or slow to change even when the need to do so is apparent, with the result that they fail to seize the opportunities. (Sarrafzadeh 2004). For this reason, Loughridge (1999) suggests,

more attention should be paid to the personality, motivation and career aspirations of the students recruited. This is an area that may repay some study because it is by no means clear that LIS schools and departments are attracting students who are significantly different from those recruited in the days when most LIS students were self-confessed bibliophiles. Indeed, while many might disagree, there is anecdotal evidence from educators that nothing much has changed in terms of student recruitment.

### **Lack of Management Skills**

Lack of management skills is one of the main reasons given in the literature for librarians' low status and image amongst employers (Rooi & Snyman 2006). It is worth noting that, although the British studies discussed earlier suggested that LIS students were graduating with the skills and understandings to work in the KM environment (Breen et al. 2002; Morris 2004), there is also some indication that LIS professionals are not generally involved in KM implementation at a strategic level (Rehman & Chaudhry 2005). Earlier it was suggested that there is a distinction between managing knowledge and being a knowledge manager, and that the latter involves effecting significant change in organizational culture. Todd and Southon (2001, p.322) make a similar distinction between KM, "which involves the co-ordination of a broad range of professionals and disciplines, *led by a professional of very high-level skills*" [italics added], and what they call "the enriched role of the information professional within a broader knowledge management program".

The study of Australian KM job advertisements mentioned earlier found that a substantial proportion of the positions advertised required a high degree of strategic *nous* and were geared to objectives such as the fostering of knowledge sharing, leveraging of corporate knowledge, development of KM strategies and the organization of cultural change. Characteristics looked for by the organizations or their recruitment agencies included "a strong background in business analysis, previous consultancy experience, experience of a wide variety technologies, high-level conceptual skills, project and change management skills, and of course a significant track record in KM initiatives" (Ferguson & Hider 2006). Lack of these high level management skills constitutes a significant barrier to greater engagement by LIS professionals in KM.

### **Conclusion**

On one thing most of the KM literature is agreed – knowledge management is a multi-faceted discipline or area of practice, which requires a wide range of capabilities. It is therefore unavoidable that LIS professionals would demonstrate deficiencies as well as proficiencies were they to attempt to take full advantage of emerging KM opportunities. Of course, the same might be said to apply to any of the other professional groups with a stake in KM, but if LIS professionals are to engage successfully in KM, they not only need to reinforce their KM-enabling competencies – they must also take a holistic view, cross boundaries and go beyond the narrow scope of their profession. As Abell and Oxbrow (2001) say, moving out of a specific information role for a while doesn't necessarily mean leaving the profession. It could be the opportunity to acquire experience that enables professional expertise to be applied with more obvious benefit. It is worth recalling a point put by CW Choo (2002):

To reinvent their roles, information professionals need to move from being information custodians to knowledge partners who have the entrepreneurial energy, the business knowledge, and the specialized skills to lever the power of information. This attitudinal shift and role redefinition must take place in a framework of a deeper and more complete understanding of how organizations create, share, and use knowledge. KM is not the domain of a

single profession but is the result of collaboration across multiple streams of expertise.

There is considerable consensus along the lines, however, that the LIS profession faces significant barriers if its members are to become major players in the KM domain. Part of the problem stems from the profession's long-standing focus on published information resources as distinct from information resources and knowledge generated within organizations. According to Koenig (2005), KM is broadening to include external information resources – which would remove one of the barriers to greater LIS engagement in KM – but that broadening remains to be demonstrated, and in the meantime the profession also continues to be hindered by its traditional focus on the information “container”, as distinct from the content. Linked to this is the continuing view – right or wrong – that members of the profession lack the business knowledge required to be a serious contributor to the leveraging of corporate knowledge. There are also the related barriers of image, nomenclature and visibility, two of which may be beyond the control of the profession, the personality traits of librarians – if, indeed, one can generalize about these – and finally the management skills.

On this last issue there is not a clear consensus. The British studies reported here and elsewhere suggest that LIS professionals are graduating with the required skills for the KM environment, yet it is widely agreed that KM requires a multi-disciplinary approach and, if job advertisements are a worthwhile guide, organizations are looking for people with very high level management skills and *experience* to effect the required changes in organizational structure and culture. Not all positions in the KM sector require a strategic focus like those considered here. There is a significant proportion of positions advertised that require operational expertise (Ferguson & Hider 2006). Whether or not one accepts Koenig's proposition that we are entering a fourth phase of KM implementation in which there is greater focus on external sources of information, there is no doubt, judging by job advertisements and the many advertisements for conferences, workshops and seminars, that we have been going through a period of greater focus on specific areas of KM (Koenig's third phase) – such as the development of corporate taxonomies – some of which may call on the kinds of information management expertise LIS graduates have.

What is clear is that, if they are to negotiate the barriers outlined here and contribute to their organizations' KM development, LIS professionals need to be able to map out the contributions that the profession is already making to KM and its potential contribution. There appears to be little attempt in the growing body of literature on LIS professionals and KM to do so (something that the authors of this paper hope to address) but there is a growing number of case studies that may provide useful indicators. Such an exercise would be useful both for the profession itself and for its educators. As noted earlier, KM programs tend to vary according to the academic department providing the program, and there may be a danger that the focus on information “containers” at the expense of content is perpetuated by educational programs. Of course, this may be unavoidable where LIS educators attempt to add KM to already full LIS programs instead of providing separate KM programs (Ferguson & Hider 2006), thus preparing LIS graduates for the potential job market in KM.

For LIS researchers, there is a considerable amount to be done, not simply in terms of the mapping exercise referred to here. If it is the case that librarians still suffer in terms of image and visibility then there is a clear need to undertake some market research and establish just what senior managers think they want in their knowledge managers and how they perceive the LIS profession. For the professional associations, too, there may be some work ahead. Breen and her colleagues suggest (2002, p.131) that LIS graduates need to market themselves more effectively. This is a role that they share with their professional associations. If some of the external perceptions about the profession are unfounded, such as the view that LIS professionals are insufficiently engaged in

and knowledgeable about business goals – and it is assumed here that these are misconceptions – then our professional bodies need to help persuade employers and employers' associations that the profession has changed, that it continues to change and that its contribution to organizational knowledge sharing and generation can contribute to organizational performance.

University librarians have made significant attempts in recent years to move beyond their library walls and engage more with their parent institutions. The most obvious example is the development of institutional repositories, typically projects that have been led by university librarians. Such developments see university libraries transform themselves from collecting agencies, responsible for the development and management of collections of published information resources (whether physical or electronic), to publishers, with a focus on providing access to their universities' research output. Earlier five broad roles for librarians in KM were identified: facilitating an environment conducive to knowledge sharing; managing the corporate memory; transfer of information management and related skills to a new context that is linked to business processes and core operations; development of corporate information literacy; and management of information in a digital/electronic environment (Rooi & Snyman 2006). The development of institutional repositories and supporting metadata engages roles 3 and 5.

The fourth role is another in which there are interesting developments, with an increasing emphasis in recent years on embedding information literacy instruction in the curriculum, but here too there is a challenge. Librarians need to move beyond the notion that information literacy is concerned primarily with teaching library users about the library's information tools (catalogues, databases and so on) and to see it in broader terms of furthering their universities' mission to foster lifelong learning in its students and of engaging with organizational learning to develop an information literate workforce. They need to convince themselves, not just senior management, that they have a contribution to make.

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