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# Knowledge Management through the Lens of Library and Information Science: A Study of Job Advertisements

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## ABSTRACT

Knowledge management (KM) is influential as a concept and practice, referring to the capture, codification, and interpretation of knowledge. KM can be viewed as a form of library and information science (LIS) or a distinct professional area. Wider debates around the skills of newly qualified LIS workers, the LIS curriculum, and the current employment market have meant that KM roles present opportunities to LIS professionals. The reported study investigated similarities between KM and LIS jobs by examining 165 U.K.-based KM jobs in 2011. Job advertisements were coded using keywords derived from the Quality Assurance Agency's Subject Benchmark Statement for LIS. Findings showed KM jobs required and prized the development of information architecture, Web 2.0 tools, databases, and other applications and emphasized the capture and dissemination of knowledge through brokerage. Advertisements showed the importance of "contextual" skills, including relationship management, strategic management, and compliance. Numerous areas in the LIS benchmark statement are shared with KM job roles, particularly facilitating access to information, structuring information, and providing an "expert advisor" service. LIS and KM have similar traits but not necessarily of the same type. LIS can be conceptualized as a profession with clearly defined boundaries, professional routes, and frameworks, while KM is more of a cross-cutting "practice" that embodies a range of professional skills, including, but not limited to, LIS.

## INTRODUCTION

*Knowledge Management*

Knowledge management (KM) describes “an attempt to grapple with the capture, analysis, and effective retrieval of formally acquired knowledge” (Feather, 2004, p. 205). There has been a growth of interest in KM as a credible area of academic research, with the establishment of peer-reviewed journals (*Journal of Information and Knowledge Management*, *Journal of Knowledge Management*, and *Knowledge Management Research & Practice*). There are also professional organizations like Knowledge Management Professionals (U.S.), the Information and Knowledge Management Society (Singapore), the Henley Knowledge Management Forum (U.K.), and the U.K. government’s Knowledge Council.

The growth of KM is emphasized in the development of taught graduate programs in the United Kingdom that explicitly refer to KM (see table 1). There has been a trend for organizations including McKinsey and Co., Chaparral Steel, and KPMG to actively engage with KM strategies and tools (Abell & Oxbrow, 2001; Davenport & Prusak, 1998). There is strong engagement in law firms, where KM has led to the creation of know-how functions and professional support lawyer (PSL) roles (Doe, 2006) (also known as knowledge management lawyers). A similar trend can be traced in publicly funded organizations, with evidence that governments in the United Kingdom and Europe are engaged with KM (Abell & Oxbrow, 2001; Jussilainen, 2004). This is reflected in U.K. government policy, particularly the establishment of the Knowledge and Skills Framework in the National Health Service (NHS).

Table 1. Knowledge management courses in the UK

Course title (and degree)	School/Department	Institution
Human Resources and Knowledge Management (MA)	Management School	Lancaster University
Knowledge Management for Innovation (MA)	School of Applied Sciences	Cranfield University
Data Mining and Knowledge Management (MSc)	School of Computing, Information Technology and Engineering	University of East London
Information and Knowledge Management (MSc)	Department of Information Science	Loughborough University
Information and Knowledge Management (MSc)*	Applied Social Sciences	London Metropolitan University
Information Management and Knowledge Sharing (MSc)	School of Computing and Information Systems	Kingston University
Knowledge Management (MSc)	School of Management	Nottingham Trent University

\*Course discontinued

The creation of the chief knowledge officer (CKO) role (Bednarek & Sciborek, 2010) is a symbolic example of the increasing influence of KM. This is a senior management role involving executive responsibility, with roles in organizations like Dow Chemicals and Skandia (Davenport & Prusak, 1998). This type of role can be poorly defined, as it cuts across functional areas (Abell & Oxbrow, 2001; Burstein, Sohal, Zyngier, & Sohal, 2010).

Despite this trend in academia and big industry, there is evidence that small and medium-sized enterprises (SMEs) do not fully engage with KM. SMEs rarely have specific CKO roles, in contrast to larger organizations (Pillania, 2008). Studies by Nunes, Annasingh, Eaglestone, and Wakefield (2006) and Pillania (2008) demonstrate that SMEs lack the resources to invest in KM and perceive KM as a nonessential part of business.

#### *The Information Profession*

The rise of KM is paralleled by a discourse around the rapid change to the library and information science (LIS) profession. The operational convergence of IT and library services has resulted in work assimilation between the library and computing professions (Wilson, K. M. & Halpin, 2006). This has partly led to a discussion of the concepts of “blended” professionals, or “Librarians 2.0,” describing professionals who are technologically literate with different media (Broady-Preston, 2009; Partridge, Menzies, Lee, & Munro, 2010).

Studies of job advertisements (ads) have been increasingly used as a method to examine these issues of LIS identity and skills. Park, Camei, and Marion (2009) and Kinkus (2007) indicate that there is pressure for librarians to quickly adapt to new roles, with evidence from job ads that entry-level professionals perform managerial tasks and that employers expect librarians to become “instant” project managers. This is supported by research using different methods, like Corral and O’Brien’s (2011) study on legal information professionals, which emphasizes the role of on-the-job training in developing skills.

Job ads have also demonstrated that behavioral and affective skills in performing a job are very important, particularly in relation to communication skills (Ahmed, 2005; Choi & Rasmussen, 2009; Gerolimos & Konsta; 2008; Todd, McKeen, & Brent, 1995; White, 2000; Wu & Ping, 2008). A study of marketing jobs by Schlee and Harich (2010) found that “ethical decision-making” was a key skill, while Levin and Weiss-Gal’s (2009) research on social work job ads identified the importance of “embedded skills.” Evidence from focus groups supports the notion that performing a job successfully relies more on personality than qualifications (Partridge et al., 2010).

Research using job ads has suggested that LIS curricula should be responsive to dynamic workplace environments (Clyde, 2002; Mathews &

Pardue, 2009; Moore, 1987). There are concerns that curricula are not fulfilling current employment market needs (Cronin, Stiffler, & Day, 1993; Gerolimos & Konsta, 2008; Mathews & Pardue, 2009). This is pertinent because the current job market can be challenging for new professionals, who often lack the experience required to be successful with job applications (Orme, 2008). Choi and Rasmussen's (2009) research articulates implications for LIS curricula, while the WILIS project tracks the career paths of LIS graduates (Marshall et al., 2009).

The pressures of the employment market have arguably resulted in an "erosion of identity" (Um & Feather, 2007, p. 262) and a debate around "professional differentiation and identification" (Kennan, Cole, Willard, Wilson, & Marion, 2006, p. 193). "Information" is a concept at the heart of diverse disciplines including information systems, information management, and information analysis (Feather, 2009; Schlogl, 2005; Vieira da Cunha, 2009).

Professional identity can theoretically be crystallized in skills and competencies professional frameworks (Corrall, 2010). These include the

- American Library Association (ALA) Core Competencies of Librarianship (8 areas);
- Chartered Institute of Library and Information Professionals (CILIP) Body of Professional Knowledge (BPK);
- Australian Library and Information Association (ALIA) Core Knowledge Skills and Attributes;
- Government Knowledge and Information Management Professional Skills Framework;
- International Federation of Library Associations and Institutions (IFLA) Guidelines for Professional Library/Information Education Programs;
- Quality Assurance Agency (QAA) Librarianship and Information Management Subject Benchmark Statement.

There is disagreement that these frameworks provide valid reference points for professional identity. Feather (2009) concedes that little of CILIP's BPK is unique to LIS, while Huckle (2003) states that the BPK has not reflected changes in curricula. As a result, CILIP's Future Skills Project has reviewed its professional framework and has developed the new Professional Knowledge and Skills Base (CILIP, 2012b, 2012c). Prior research analyzing job ads has sought to challenge current skills frameworks and to provide constructive input into revisions (Ferguson, Hider, & Lloyd, 2008).

### *Synergies*

KM can be closely linked to activities that have significant overlap with LIS practice. The skills frameworks explicitly link LIS to a core of "knowledge." CILIP's BPK states that knowledge is its "root component," while

the QAA's Subject Benchmark Statement postulates that "central to this domain is knowledge, recorded as information objects" (QAA, 2007, p. 2).

The QAA describes how LIS involves supplying information through "physical and virtual channels, media and formats" (QAA, 2007, p. 3). CILIP's BPK states that "knowledge is represented and organised by means of conceptual structures, notably classification schemes, taxonomies and ontologies." Similarly, the QAA emphasizes the "description, classification and indexing of information and knowledge containers and information" (QAA, 2007, p. 3).

Classification, as the "meaningful clustering of experience" (Kwasnik, 1999, p. 24), has a clear role in KM. In KM, information architecture acts as "scaffolding" (Risku, 2004, p. 38) supplying a standardized infrastructure that facilitates access (Janicot & Mignon, 2012). Evidence shows that KM activities frequently involve the creation of classification schemes and taxonomies (Dixon, McGowan, & Craven, 2009; Doe, 2006). Technical abilities are prized in KM roles, with a requirement for programming, web design, and database skills (Davenport & Prusak, 1998).

LIS is characterized by a strong focus on service delivery (Rehman, Baker, & Majid, 1993; Rowley, 2003; Um & Feather, 2007). LIS professionals can be described as "intermediaries between information sources, information systems and information users" (Feather, 2004, p. 179) or critical interpreters of information (Van Rooi & Snyman, 2006). An element of this expert service in KM is in coaching to facilitate independent knowledge access (Dennis & Vessey, 2009; Wormell, 2004). This is similar to information literacy and enabling library users to be independently capable of accessing information (O'Farrill, 2010).

The QAA emphasizes the importance of "awareness of the cultural, ethical economic, legal, political and social issues" (QAA, 2007, p. 4), while CILIP's (2012c) Professional Knowledge and Skills Base places "ethics and values" at the center of its framework. KM is heavily focused on organizational context, with Rowley (1999, p. 417) suggesting that successful KM is "dependent upon structures and cultures." Davenport and Prusak (1998, p. 112) argue that "knowledge management takes place in the context of specific projects to manage specific forms of knowledge." Compliance is important, with the QAA focusing on "standards and codes of practice" (QAA, 2007, p. 2) and CILIP (2012b) highlighting the legal dimension of information (data protection, intellectual property).

A strand of context is in developing strong relationships. The establishment of trust is recognized as an important component of successful KM initiatives (Janicot & Mignon, 2012; McManus & Loughridge, 2002). Nunes et al. (2006) argue that knowledge itself is a strategic "asset," while Sinoitte (2004) similarly suggests that KM can contribute to organizational strategic goals. Moore (1987) identifies the growth of specialist managers at senior levels, who shape and drive organizational strategy.

LIS can be perceived as a tradition encompassing similar disciplines like communication and media studies, computer science, business administration, and information systems (Cronin et al., 1993; Orme, 2008; Um & Feather, 2007). Similarly, KM has strong links with information systems (IS), strategic management, human resources, and project management (Alvesson & Karreman, 2001; Sarrafzadeh, Martin, & Hazeri, 2006).

*Contrasts and Interactions*

There are elements of KM that do not explicitly align with LIS practice. For instance, KM is often associated with human resources, organization development (OD), and organizational learning (Bednarek & Sciborek, 2010; Srikantaiah, 2000).

A major contrast between KM and LIS is demonstrated through perceptions and categorizations. The ambiguity of KM is reflected in the absence of a classification in the Joint Academic Coding System (JACS) used by the U.K.'s Higher Education Funding Council for England (HEFCE). In contrast, "Information services" is classified in P100 of the JACS, defining it as "the study of the administration of information resources and services" (HEFCE, 2011).

LIS is defined as a distinct subject in the QAA's subject benchmark, which scopes curricula in honors degrees in the United Kingdom. KM, despite its growing prevalence in taught graduate courses, does not have a distinct category. There is a similar situation with occupational classifications. The U.K. government's Standard Occupational Classification does not have a category for KM. Within the International Standard Classification of Occupations (ISCO), "librarians and related information professionals" are classified as a discrete subset of "legal, social and cultural professionals" (ILO, 2011).

There are various interpretations of how KM and LIS interact. Wilson (2002) argues that KM is an amalgamation of activities linked to LIS functions (data mining, intellectual property, information systems, and decision support tools). This is reinforced by Schlogl (2005), who points out that KM includes features of LIS practice, like its focus on content and technology. This suggests that KM is a "mere re-badging and relabeling" (Vasconcelos, 2008, p. 424) of LIS practice. Corrall (1998) argues that KM is a complex set of practices that have contributed to major organizational changes, while Rowley (2003, p. 433) describes KM as a "collection of strategies and practices."

A simpler view is to define KM and LIS as completely separate disciplines, with Johanssen (2000, p. 53) postulating that information management (IM) and KM are "independent management disciplines." In this light, it is possible to perceive KM and LIS as "competing for ownership" (Hazeri, Sarrafzadeh, & Martin, 2007, p. 168; Ferguson et al., 2008).

*The Present Study*

To understand the current state of the LIS profession, previous research has deployed the analysis of job ads to investigate trends. This is a method growing in uptake, with eight studies published in 2010 alone (Bychowski, Caffrey, Costa, Sudhakaran, & Zhang, 2010; Han & Hwse, 2010; Kenechukwu, 2010; Kumar, 2010; Majid & Mulia, 2010; Reeves & Bellardo Hahn, 2010; Sanchez-Cuadrado, Morato, Andreadakis, & Moreiro, 2010; Wang, Tang, & Knight, 2010).

The foci of studies of job ads can be grouped into four areas. First, studies can examine LIS job ads by interrogating job ads across an entire labor market. These include studies on LIS jobs by Cullen (2000) in Ireland, Orme (2008) in the United Kingdom, and Willard and Mychalyn (1998) in Australia. Second, studies can focus on a specific sector, like research on academic libraries (Marion et al., 2005; Reser & Schunemann, 1992) and the health sector (Atlas, 2000; Palmer, 1978; Wu & Ping, 2008). Third, studies can focus on specific roles like records management (Cox, 2000; Pember, 2003), preservation (Cloonan & Norcott, 1989), and digital librarianship (Albitz, 2002; Croneis & Henderson, 2000). Fourth, studies can concentrate on specific skills sets, like studies on foreign language skills by Zhang (2008) and project management skills by Kinkus (2007).

As KM jobs exist across different sectors and may incorporate numerous skills, the present study falls into the third category of focus. The study seeks to examine a specific “type” of specialist role in the shape of KM roles. Studies have previously sought to examine KM roles through the “lens” of LIS. Ferguson et al.’s (2008) study of ads in Australia sought to compare KM with the ALA framework, while Morris’s (2001) U.K.-based study examined 113 ads using a similar approach. Majid and Mulia (2010) took a more deductive approach, examining ads without a prior framework from LIS to guide the findings.

This research is valuable because it is U.K.-based (unlike many studies of job ads, which are set in the United States) and focuses on KM jobs (where only a few studies examine jobs in this area). The study presents a deep analysis by examining the content of ads and associated job descriptions through verbatim quotes and word occurrences. The study is valuable to practitioners seeking work, policy makers who shape LIS curricula, and researchers deploying the method of job ad analysis.

The research question of the present study is, What skills and competencies do LIS professionals share with KM roles? Specific objectives were to

- collect job advertisements for jobs in KM;
- analyze job advertisements in KM using existing examples of LIS skills (for example, the QAA Subject Benchmark Statement).

This article is structured in a linear-analytic style. The literature review and background have outlined the research context and highlighted key findings of previous research. The following methodology section evaluates the analysis of job ads and explains the method of data analysis and collection. The subsequent section on findings and discussion presents the results and explains what these results mean in the light of prior research. The conclusion summarizes key findings, the contribution of the study, and its implications for further research and practice.

## METHODOLOGY

### *Job Advertisements*

The method of collecting job ads has the major benefit of obtaining readily accessible data (Bartram, 2000; Schlee & Harich, 2010; Vieira da Cunha, 2009). This is in contrast to greater logistical challenges when collecting survey or interview data. Job ads are organic and naturalistic, predate a researcher's intervention, and enable longitudinal comparisons (Todd et al., 1995; Vieira da Cunha, 2009). Collecting job ads has practical benefits, with the outcomes valuable for job seekers and the unemployed (Beile & Adams, 2000; Cullen, 2000).

However, job ads contain strong elements of bias. The advertising stage of recruitment is essentially focused on attracting the best candidates (Bartram, 2000; Parry & Tyson, 2008). Equally, a job ad could be viewed as a normative expression of an ideal future state, rather than a description of current reality (Howard, 2010). There are legislative constraints and organizational pressures that can influence ad content. This challenges the assumption that job ads represent an underlying reality in a profession. There are numerous uncontrollable variables, which cannot be measured or understood, because job ads arguably isolate a phenomenon from its context.

Practical problems include effectively collecting and managing a large data set and identifying all appropriate job ads. There is a specific issue with online ads that are only advertised for a short time period (Bartram, 2000; Davies, 2008). These problems are exacerbated by the lack of consolidated guidance on the method in the research literature (Harper, 2012). This means that collective knowledge of the method is not accumulated, which increases the likelihood of errors becoming embedded in the research method.

In reviewing studies of LIS job ads, the researcher found that the largest sample size was 6,725 (Wright, 1988), and the smallest sample size was ten (Shank, 2006). A typical sample size of job ads is generally less than 1,000 and often between 100 and 200. Examples include Xu and Chen's (1999) study of 133 job ads, White's (2000) study of 127 ads, Cullen's (2000) study of 123 ads, and Clyde's (2002) study of 150 ads. The study of the longest

duration covered forty-four years of ads (Wang et al., 2010), while the shortest duration was one month (Frame, 1972). A more typical duration was six months in studies by Morris (2001), Majid and Mulia (2010), Deltelsen (1992), and Davies (2008).

Job ads can be analyzed using the professional frameworks described earlier. Ferguson et al. (2008) used the ALIA framework to derive nineteen core skills that formed the basis of a coding schema for job ads and suggested that one outcome could be a revision of these frameworks. The relevance of the Special Libraries Association (SLA) competency framework and CILIP's Body of Professional Knowledge are both discussed by Orme (2008) in her study of 180 ads from CILIP's *Library and Information Gazette*.

### *Scope*

The criteria for selecting the sample were that the word "knowledge" should be present in the job title and the job should be located in the United Kingdom. The selection of ads with "knowledge" followed the approach taken by Ferguson et al. (2008), which concentrated on job ads in Australia. From the original data set, the researcher excluded four types of job ads:

- *Duplicate job ads.* This is consistent with previous studies (Choi & Rasmussen, 2009; Zhang, 2008).
- *Job ads with insufficient textual data.* This was the case where ads contained details like job title or salary but did not include further particulars.
- *Job ads in knowledge transfer partnership roles or knowledge exchange roles in HE.*
- *Job ads where the post advertised was not located within the United Kingdom.*

### *Data Collection and Analysis*

The data collection took place over six months (January 1 to June 30, 2011). Job ads were sourced from U.K. recruitment web sites, including LISjobs.net, indeed.co.uk, monster.com, jobs.ac.uk, TFPL, BIALL (British and Irish Association of Law Librarians), and NHS jobs. The researcher searched web sites using the search parameter on a fortnightly basis. This was implemented by establishing weekly e-mail alerts for job sites and trawling web sites. Relevant job ads and descriptions fulfilling the search parameters were saved as electronic files and named with a three-digit number.

The job ads were categorized by core facets (provenance, and the date sourced), and information about the job advertised (job title, organization name, advertised salary, geographic location, and contract type). The data collected were in a range of formats. Job ads described salary levels in round figures (£50k), precise figures (£47,096), and by adjectives (e.g., "competitive"). Salaries were analyzed by the minimum salary specified in the ad. The spreadsheet included a field identifying duplicate ads, to ensure these were excluded from the final analysis.

The researcher conducted qualitative cross-sectional analysis of the job ads. Cross-sectional indexing provides a “set of common principles and measures” (Mason, 1996, p. 111) for data analysis. As this study was interested in the opportunities for LIS professionals in KM, the keywords were loosely derived from QAA’s (2007) Subject Benchmark Statement for Librarianship and Information Management.

The QAA framework was initially deployed deductively, with key themes providing a structure for coding the data (table 2, columns i and ii). The researcher then shifted toward a more inductive approach, using the data to develop more detailed codes not explicitly described in the QAA framework (table 2, columns iii and iv). Thus, the QAA framework acted as the initial “lens” through which more detailed codes were later allowed to emerge from the data. Coding job ads using a professional skills framework is consistent with previous work (Ferguson et al., 2008; Park et al., 2009; Choi & Rasmussen, 2009).

## FINDINGS AND DISCUSSION

The findings and discussion section presents an overview of the sample and identifies key features of each ad. The results are discussed in detail by using the three organizing principles identified in table 2 (column ii). The findings are followed by a discussion of how the results relate to prior research and issues they raise in relation to the research question.

### *Overview of Sample*

A total of 326 ads were collected, of which 161 were excluded (see table 3), which meant that the sample size was 165.

The majority of jobs were based in London or the southeast of England, supporting findings by Younger (2005) (see fig. 1).

The majority of jobs (ninety-three) did not provide a numerical salary level, with thirty-nine describing the salary as “competitive” or “negotiable.” Only seventy-two ads provided a numerical indication of the salary level, with forty-nine of these between £20,000 and £50,000 per annum. While only ten job ads advertised salaries above £60,000, these results are skewed by the absence of numerical salary details in some ads (see fig 2).

The jobs were placed by a variety of organizations, most commonly by recruitment companies (see table 4). There was a wide range of job titles in job ads, with different nouns following “knowledge” or “knowledge management.” The most common descriptor was “manager,” occurring in seventy-one job ads (43 percent), followed by “analyst,” used in fourteen ads (8 percent) (see fig 3).

### *Information Content*

*Systems and Solutions.* Job ads sought professionals with attributes enabling them to perform “operations on document content” (CILIP’s BPK). Three posts at a consultancy service required a KM worker to “advise on

Table 2. Keywords used in study

(i) QAA (2007) area	(ii) Coding area	(iii) Specific strand	(iv) Example concepts
Information resources and collection management	<b>Information content</b>	Information architecture and metadata	Taxonomies Metadata Tagging Classification Indexing
		Technology and applications	Systems Solutions Tools Databases Websites Web design Programming Portals Intranets Web 2.0
Information retrieval and knowledge organization		Capture and collection of information	Research Capture Retrieval
Information literacy and users support		Training and facilitation	Training Facilitation Workshops Focus groups Learning
Information services and intermediary roles	<b>Information services</b>	Interpretation and dissemination	Brokerage Mediation Interpretation Dissemination
		Quality assurance	Currency Relevance Quality Integrity Review Version control
		Compliance	Data Protection Intellectual property Governance Copyright Compliance Regulation
Information agencies and professional institutions	<b>Information context</b>	Strategy	Strategy Mission Vision Goals Implementation
		Relationships	Communication Confidence Stakeholders Clients
Information environment and policy context		Networks and global interactions	Collaboration Culture Society Geography Networks Communities

Table 3. Excluded job adverts

Reason for exclusion	Number of adverts (n=161)
Duplicate	84
KE or KTP	45
Insufficient information	13
Not in UK	12
HE lecturer	5
Not in KM	2

Table 4. Organization industry

Sector	Number of job adverts (n=165)	Proportion
Recruitment	48	29%
Not stated	42	25%
Consultancy services	15	9%
Finance	8	5%
IT	7	4%
Media	5	3%
Higher Education	4	2%
Health (public)	4	2%
Leisure	4	2%
Professional society	3	2%
Energy	3	2%
Engineering	3	2%
Manufacturing	3	2%
Services	2	1%
Heritage	2	1%
Health (private)	2	1%
Retail	2	1%
Central government	1	1%
Travel	1	1%

knowledge solutions and new technologies,” while a post for a portal and knowledge support analyst described how the post holder “implements solutions and reviews results.” A knowledge manager post involved “proposing and delivering optimal solutions using either existing or new tools as part of an overall strategy,” while another attached importance to “conceptualizing solutions in . . . other knowledge management projects.”

The word “system” was used seventeen times in job ads. A knowledge analyst job involved “helping the new system embed into business,” while another ad described how the successful applicant would “develop and implement revisions to the KM system.” This was supported by technical expertise, with one ad highlighting “technical writing direction for complex content into the system.” Like the knowledge analyst job, one

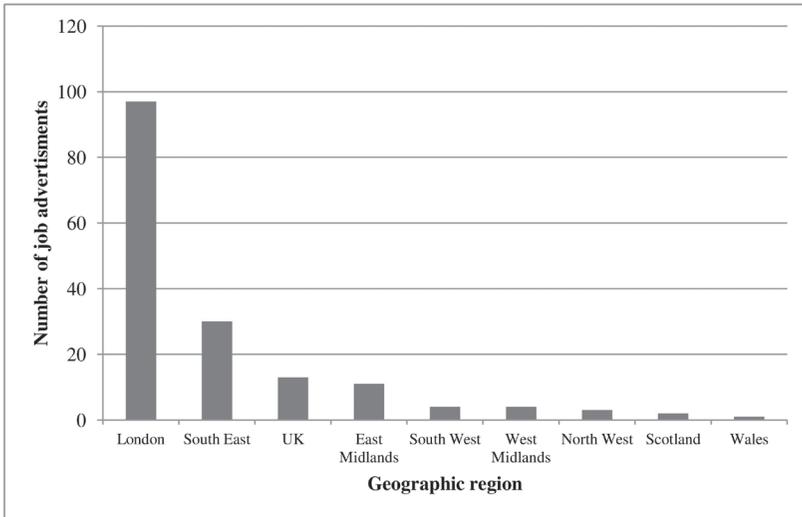


Figure 1. Geographic location of advertised jobs.

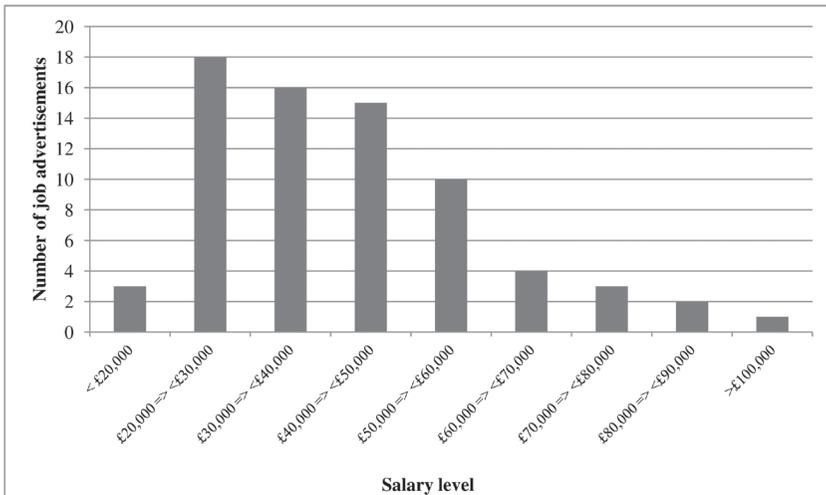


Figure 2. Salary levels of advertised jobs.

job focused on implementation, requiring “experience of implementing knowledge management practice systems.” The word “tool” occurred sixteen times in the ads, while “technology” occurred fifteen times. Theoretical understanding of technology was highlighted in a role requiring “a firm understanding of key knowledge management technologies/concepts, such as search, content management and communities of practice.” Other



Figure 3. Job titles of knowledge management roles (using Wordle analysis).

posts highlighted the selection of “technology suitable to support the new model” and on “enabling technologies and knowledge management applications.”

*Databases and web sites.* Database and web site design were prevalent themes. Private sector roles involved managing a “database of customer contacts” and “updating databases.” This extended to ensuring “appropriate standards are in place for effective management of data within key databases.” A post in the voluntary sector required the “ability to create and develop databases,” while a legal knowledge manager ad described responsibility for creating a “precedent database.” Design was emphasized in a role where the candidate would “assist in building an international and domestic proprietary database.” Database design required a “familiarity with relational databases and how they work” and “knowledge of SQL databases.”

“Systems” included the development of web sites and portals, particularly Sharepoint (referred to by twenty-one ads). An information and knowledge manager was “responsible for enhancements and maintenance of the . . . web site,” while a knowledge management specialist role specified “a track record in managing, refreshing and re-launching Intranet sites.” This was connected to strategy, with a corporate information and knowledge manager expected to “lead and deliver all aspects of the Council’s Corporate Web Strategy.” Some roles focused on system integration, with one ad specifying that the post holder “take a leading role in the integration of disparate Intranet platforms into a coherent knowledge management platform.”

A strong theme was on skills with social media and Web 2.0. One role sought an “avid social networker,” while another concentrated on “social computing implementation.” Successful candidates should have “credibility in applying Web 2 tools to solve business issues,” demonstrating the importance of organizational context. An events coordinator for knowledge services role involved delivering “a series of webinars, podcasts, and other on-line events.” Some ads referred to social media as a tool to “develop collaborative environments such as communities of practice and the use of social computing tools for both knowledge creation and transfer.”

Skills with technology are expected from KM professionals, supporting the argument that ICT is an integral part of KM practice and is a valuable skill in LIS (McManus & Loughridge, 2002; Nunes et al., 2006; Younger, 2005). The frequent use of the word “solution” suggests that KM professionals should be able to sustain a balance between theoretical understanding and practical implementation.

KM professionals are expected to be skillful in learning new applications effectively. This suggests that strong conceptual understanding of technologies, and confidence with unfamiliar applications, is essential. Many ads prized skills spanning the lifecycle of “content,” with individuals in KM roles working in selection, procurement, and implementation of technology. This suggests that KM roles demand a holistic understanding of different phases of system development, in order that implementation is shaped by the context in which technology is used.

The results emphasize the importance of skills in database design and implementation. These are distinctive technical skills that are desirable, partly because these skills can be adapted to different technologies. Technologies like Sharepoint are built on database principles, meaning that database skills are highly transferrable across applications. The emphasis on database design contrasts with LIS perceptions of database design as a peripheral skill (Long & Applegate, 2008).

The role of web management in KM jobs overlaps with the roles of marketing and communications professionals, particularly if the role is to actively create promotional content. There is a connected question over whether “knowledge manager” is simply a relabeling of an “IT manager” or “system administrator.” This supports previous evidence suggesting that web management skills enable autonomy in LIS by reducing reliance on IT professionals (Bryant, 2006; Halford, 2006; Herrera, 2008). This is commensurate with the argument that KM is a relabeling of the information profession (Wilson, T. D., 2002). The role of web management is shared with the description of “portal design and maintenance” in CILIP’s BPK and supports evidence of activity in the area by LIS professionals (Hayward-Wright, 2008; Herrera, 2008).

A distinctive strand of web management was in Web 2.0 tools, which harmonizes technological expertise and the ability to facilitate interactions

and collaborations. This is perhaps underpinned by an implicit expectation that KM workers will facilitate communication “conduits” through the “social” element of Web 2.0. Like database skills, web management skills rarely referred to specific examples of content, indicating that facilitating access may be more important than content itself.

*Capturing Content.* A large number of ads described capturing and collecting knowledge through tasks as diverse as “literature searches,” “capturing lawyer profiles and photos onto a central database,” and the “collection of cost data from all projects and commissions.” A knowledge analyst role in manufacturing required an individual to “build and maintain our rate maker, to establish world-wide rates data from a variety of sources.” Similarly, a knowledge-base information analyst involved the “capture of empirical and estimate information from project delivery, benefits information, external benchmarks . . .”

The ads indicated that KM professionals capture content through primary research. One job involved “eliciting knowledge by interviewing people and writing citations/case studies/lessons,” while a private sector health company encompassed “in-depth interviews with external content experts and . . . clients.” Other job ads referred to the harvesting of organizational knowledge, with a knowledge manager role involving “capturing feedback leading to the creation of new or revised best practice.” The collection of qualitative insights was mentioned by a post entailing “the identification, capturing, sharing and re-use of outputs, learning, and client insights.” In a comparable job, the candidate was required to “identify, create & distribute key insights from both internal and external sources.”

The results showed a strong emphasis on content capture, which is comparable with “traditional” library activity in collection development and information literacy. An implicit attribute is the ability to critically analyze, evaluate, and interpret the quality and relevance of content. Content capture is different from the emphasis on the “system-oriented” view of KM described by Schlogl (2005) because it involves creative actions on content.

KMs have to be able to collect qualitative “insights” from inside an organization, underlining the view that knowledge consists of “insights, hunches, intuitions and skills” (Nunes et al., 2006). Qualitative data collection through focus groups and workshops coheres with the QAA’s focus on the “understanding of qualitative and quantitative research methods” (QAA, 2007, p. 4). The difference might lie in the scope of this content capture. While in LIS, research might be limited to a specific user group, in KM roles, there is a wider scope in the way that “insights” are collected across an organization. This might demonstrate that KM has a broader role compared with LIS (Sarrazzadeh et al., 2006).

*Information Architecture and Metadata.* Classifying information was evident in an ad for a knowledge manager, whose main responsibilities were

to “define, implement, manage and support an effective, orderly and auditable structure for all critical company information.” Information architecture was perceived as part of a wider information lifecycle in a job ad highlighting responsibilities for “acquiring, codifying, integrating, packaging, indexing, and distributing content.”

“Taxonomy” was used eleven times, with a job ad for a knowledge analyst stating that the job included “the compilation of new dictionaries, thesauri and grammars for organizations, people, equipment and events.” Other jobs required “an understanding of the use of taxonomies and classification structures” and “understanding of coding and use of taxonomies.” An ad for a KM content developer specified “a background in information architecture: taxonomy and metadata design,” while an understanding of “organizing methods and principles” and “content strategy principles” was required by others.

A connection between information architecture and search engine optimization (SEO) was drawn in a knowledge management consultant role, which flagged “processes such as searching and tagging.” A senior role as head of knowledge and information had the tasks of “ensuring that our information and knowledge resources can be readily accessed and easily retrieved” and of overseeing the “development of a corporate taxonomy and metadata.”

The results demonstrate that skills associated with information architecture and classification schemes are important in KM roles. This is a distinctive part of the QAA, which highlights the role of “physical and logical ordering of collections” (QAA, 2007, p. 2). The importance of metadata is connected to skills in the “secondary processing” (CILIP BPK) of content through XML schemas and online “tagging.” This emphasizes that theoretical understanding of information architecture and metadata is valuable when translated to practical contexts. The tasks associated with metadata and information organization are similar to skills highlighted in previous research and in practitioner activity (Halford, 2006; Han & Hwse, 2010; Moore, 1987). The desired skills have strong conceptual links to well-established “standards” in cataloguing (Dublin Core and AARC2) suggesting that some standards act as a shared foundation for LIS and KM.

Competencies around metadata are valuable because of the capacity of these tools to integrate between systems. Job ads showed the value of technical integration with retrieval tools like search engines and being able to support interoperability across applications.

The strong emphasis on skills in information architecture may suggest that this is an area where LIS professionals have an advantage over other professionals. The assimilation of metadata skills into KM demonstrates the high value associated with knowledge organization and the influence this might wield in organizations. There is a risk that the incorporation of LIS skills into KM may result in the erosion of the distinctiveness of LIS skills.

*Information Services*

*Training and Guidance.* The word “training” was deployed forty-four times, with one ad concentrating on training in “online resources to lawyers globally.” An NHS role highlighted the provision of “basic library training and help for users,” while a consultancy services post specified the delivery of “training sessions for practitioners in KM processes, tools and resources.” Similarly, a senior public sector role required the provision of “training and awareness sessions in knowledge sharing behaviors, tools, techniques, and approaches for all grades of staff.” Training often had a wide remit of “identifying and developing training programmes for employees of all levels.” The job ads also described creating training documentation. A knowledge management expert role required “specific experience in documenting information technology software and systems” while another highlighted the development of “instructional training manuals.” A focus on process improvements was emphasized in a job requiring a knowledge-base writer to “assist in the creation of article templates, workflow and content quality guidelines.”

The facilitation of “workshops” or “focus groups” differed from purely instructional forms of training. In a knowledge executive role, “by organising various events and focus groups, the knowledge management team aims to highlight and showcase the rewards allied to efficient and consistent knowledge management.” A comparable ad in the energy sector emphasized how the post holder would “lead learning workshops, including lessons capture workshops and knowledge management planning sessions.” KM workers were perceived as a source of organizational expertise. A knowledge manager job required “willingness to act as an internal advisor on all knowledge, data and content management issues,” while a public sector role stated that the post holder would “help colleagues across the organisation to meet their evidence needs by providing expert advice and support.”

The results showed that training and facilitation skills are essential in KM job roles. Training varied from training in specific applications, to facilitation designed to influence behavioral change. Specific instructional training is familiar to LIS professionals, with more traditional KM roles in the NHS involving user training to support resource discovery. The results reinforce the argument that the introduction of new technology in KM necessitates user training (Herrera, 2008).

The job ads have shown that knowledge managers are “the human interface” (Winterton, 2006, p. 39) between people and technology, a characteristic arguably shared with LIS. Knowledge managers have to be experts in technology and information architecture, while listening to and synthesizing different perspectives. The “expert advisor” role in KM is comparable to the role of LIS workers in acting as intelligent filters (Atfield, Blandford, & Makri, 2010).

Facilitation to influence behaviors is “softer” and less well-defined. Facilitation of focus groups is similar to involvement in focus groups in academic libraries (Higa-Moore et al., 2002). The emphasis on holistic learning and the collection of qualitative insights supports evidence for conceptual links between KM and IL (O’Farrill, 2010). In particular, the KM ads share features with the way that LIS professionals “identify and make appropriate interventions” (QAA, 2007, p. 3) to support information literacy.

The lack of boundaries to facilitation demands great confidence from a KM worker because this requires working with people in a fluid context. The skill associated with this form of facilitation is the ability to shape behaviors; this skill can be challenging to acquire and develop. The strong emphasis on the qualitative elements of KM (perceptions and insights) demonstrates that KM is rooted in culture and behavior as well as systems and technology (Srikantaiah, 2000).

*Creation and Dissemination.* “Services” in KM job ads included content creation and dissemination. This was highlighted in an ad asking for the coordination of “content creation relevant for sharing within and more broadly within the firm” and an ad seeking a candidate “proficient in creating and editing knowledge base (KB) articles.” Some ads described specific content that would be disseminated, which included newsletters, current awareness alerts, web site content, toolkits, reports, legal research and good-practice guides. One job covered “the creation of KM content including know-how, current awareness and know-who,” suggesting that content could encompass contact details of subject experts. The ads sometimes underlined practical impact, with one job suggesting that content creation would increase “problem resolution rates achieved by both end-users and Helpdesk staff.”

The results support CILIP’s focus on the “generation and dissemination of documentation.” This supports the finding that KM roles are holistic, operating across various phases in the “lifecycle” of content. The use of current awareness in KM parallels the use of current awareness in LIS, where value is added through the prevention of “information overload” (Attfield et al., 2010; Hayward-Wright, 2008). The distribution of current awareness alerts demonstrates LIS and KM workers have a shared position as trustworthy “gatekeepers” of content.

*Interpretation.* A theme that emerged from some ads was that a KM professional would interpret knowledge for service users. A head of knowledge management role highlighted the “ability to interpret management information and data,” while an information and knowledge manager job specification described the “ability to manipulate, interpret and make decisions based on large data sets and make clear recommendations.” The ability to synthesize was shared between sectors, with a role in a research institution highlighting the “collation, synthesis and condensing of

knowledge into different forms.” The interpretation extended to the articulation and presentation of data (e.g., “manage the data mining of valuable usage data and presentation of this back to the various user groups”) and the ability to “explain complex concepts in layman’s language.”

Interpreting and synthesizing content is a distinctive part of KM work, which attaches importance to the “re-conceptualisation” of content (Johansson, 2000). This is shared with the strand on the “research, analysis and interpretation of information” in the IFLA (2003) statement, and is comparable with the idea that libraries are “a cost-effective way of providing access to . . . specialist information” (Feather, 2009, p. 8). This shows that KM workers require intellectual understanding of complex content, alongside the ability to articulate this intelligibly to a “nonexpert” audience. Interpretation is valuable because it leads to practical impacts and outcomes, particularly in relation to organizational decision-making.

*Quality Control and Assurance.* A strand of service within KM job roles was quality assurance. A knowledge analyst role stated that “quality assurance is extremely important to the accuracy and value of this data,” while a knowledge-base manager job ad suggested that one task was to “produce accurate and updated content in the knowledge base.” Accuracy was evident in a more technical knowledge processing developer role, which involved “ensuring the quality and integrity of the knowledge.” Editorial responsibility was highlighted in an ad outlining the duty to “provide editorial support as required,” while another emphasized the “development of process and procedures in how materials are sanitised.” A knowledge coordinator ad described how the post holder would “review, synthesise, edit and file content from various sources.”

A specific element of quality control was in sustaining the currency of content. A knowledge broker job ad sought an individual to “ensure information is regularly reviewed and retired when out of date.” A similar role sought someone to “liaise with cross channel product teams to produce accurate and updated content,” while a different role included “management of the disposal process.” Version control was a key element of maintaining currency. A knowledge documentation manager had the responsibility of “maintaining version control,” while other posts involved “ensuring tight version control” and the “maintenance of version control and release control procedures.”

Quality assurance of content was often linked to compliance with information governance standards. A knowledge integrator post partly aimed “to ensure that online content for the service line is managed and maintained effectively in line with KM governance frameworks and processes.” Another ad focused on archiving standards, stating that the post holder would “ensure content remains relevant and up to date, setting archiving standards and processes to protect long term data integrity.” A job in the NHS included the role of ensuring that “all requests, both internal and

external, meet copyright law requirements,” while a private sector role included the responsibility of overseeing an “intellectual property program.” Some ads highlighted compliance with the Data Protection Act, asking for “knowledge and experience of supporting Data Protection compliance” and familiarity with “relevant legislation on data protection, copyright, and health and safety.” Often, the role of compliance was broader, incorporating “company/risk policies,” “security requirements,” “quality management,” “digital security activities” and “licensing arrangements.”

The results demonstrate that a distinctive element of KM service is in quality control and assurance, supporting the identification of strong links between total quality management (TQM) and KM (Johanssen, 2000). The assurance of accuracy was directly linked to the ability to edit content, which suggests that the ability to shape content is as valuable as original content.

The focus on version control as an example of currency demonstrates that content is often generated internally in organizations. This shows that KM professionals have a role in managing content that is actively created “in-house,” emphasizing the end-to-end role that KM workers play in content creation and management. The role of policing version control is similar to the uses of Sharepoint technology in academic libraries (Herrera, 2008). The results underline the importance of compliance in KM roles. Many ads implicitly viewed KM workers as having a role in information governance, particularly notable in the light of evidence that LIS work now includes areas like data protection (Kendall, 2002).

### *Information Contexts*

*Relationships.* The most significant component of “context” was in building relationships with stakeholders. Jobs sought qualities like “excellent communication skills, written and verbal” and “excellent communication skills—confident, diplomatic and polite.” The language in some ads focused on the candidate’s personality. One job required a “confident and pro-active person with excellent interpersonal and communication skills,” while another sought an “outgoing and skilled communicator both verbal and written.” Confidence was viewed as a critical element of communication, with one job seeking a “confident and pro-active person with excellent interpersonal and communication skills.”

Fifty job ads explicitly used the word “relationship,” suggesting that this adds more value than merely being able to communicate. Some jobs focused on the longer-term skill of developing relationships, requiring successful candidates to “develop strong working relationships and networks with key stakeholders” and “establish good working relationships with knowledge managers in the United Kingdom and globally.” There was a perception that this ability was supported by “proven relationship management experience” and “relationship building skills.” KM workers should

be effective at sustaining reciprocal communication through listening, with ads specifying “strong communication, business consulting and listening skills” and “rapport building, listening and interviewing skills.”

This is supported by references to the value of relationships with senior colleagues. The job ads emphasized interactions, asking for a person with a “strong presence; able to interact with senior level executives inside of the firm” and the “ability to interact with senior stakeholders.” Some ads focused on “an ability to facilitate between senior stakeholders and develop strong relationships at all levels” and the value of “exceptional communication skills in order to effectively work and engage with senior stakeholders.”

The ability to build strong strategic relationships supports evidence that consensus-building skills are useful in both KM and LIS (Siddike & Islam, 2011). This is particularly relevant in light of the argument that KM initiatives require user acceptance and “buy-in” to be successful (Garcia, Annas-ingh, & Elbetagi, 2011; McManus & Loughridge, 2002).

There are questions of how LIS or KM professionals might gain relationship management skills, which are challenging to develop through structured CPD activities. This is in contrast to technical skills, which are more likely to be explicitly taught in LIS curricula, as Todd (1995) found in a study of IS job ads. The intangible nature of relationship management skills suggests there may be difficulties in measuring these skills during recruitment and selection. The growth of a wider range of evaluation methods like self-selection tools may suggest that employers are increasingly attempting to measure these skills (Parry & Tyson, 2008).

Relationship management skills might actually encompass a variety of personal qualities, like communication skills, attitudes, and a sense of humor (Howard, 2010). The intangible nature of “relationship management” skills reinforces findings on intangible skills in previous studies (Schlee & Harich, 2010; Levin & Weiss-Gal; 2009). Job ads could be seen as the surface of deeper, more specific, attributes that KM workers must possess.

Confidence, the results indicate, is a key attribute within relationship management in KM roles. This is a personal characteristic that can underpin skills in relationship-building, enabling KM professionals to work in fluid environments. It is debatable whether confidence is an attribute distinctive to LIS, with limited research into it as a professional characteristic. Confidence is commensurate with emotional intelligence because it is intangible, difficult to measure, and seems to be a foundation of what KM professionals are required to do. This supports Partridge et al.’s (2010) finding that personality is more important than qualifications. This contrasts with the idea that CPD alone can adequately equip LIS professionals for the modern workplace.

Relationships in the workplace operate in a political context, with relationships with senior staff helping to build consensus and support at

senior levels of an organization. This could be because KM professionals require support from senior staff to assist in the implementation of KM projects, systems, and initiatives. This demonstrates the influence of KM at strategic levels and raises the question of whether LIS is wielding a similar influence.

*Organizational Strategy.* A high number of job ads (fifty-seven) described how the KM post holder would shape strategy. An ad for a head of knowledge team post involved “shaping the strategic direction of the business as a whole.” Responsibilities in one post encompassed a wide stratum of business areas: “[You] will develop a vision and global strategic plan for KM, aligning new ideas with the firm’s business needs, driving innovation, global strategic planning and working in partnership with others to fulfill the following high level objectives.”

This ambitious KM role would need to be supported by the intellectual ability to understand and articulate strategy. A knowledge manager job ad in London stated that the role required a “strategic thinker with hands on capabilities in guiding objectives forward.” A knowledge-base writer role required a “strong analytical and strategic thinker with ability to draw conclusions and determine strategies based on data.” One ad stated that the role was to “drive forward the development and implementation of knowledge strategies and plans,” while fifteen job ads explicitly used the word “implement” in connection with strategies.

Implementation of strategies was linked to the ability to lead. A knowledge manager for the United Kingdom and Europe would “lead the implementation of the knowledge sharing strategy, projects and initiatives in the United Kingdom and Europe.” A comparable job as knowledge broker emphasized how the successful candidate “drives the execution of a knowledge business plan and content strategy.” An NHS post had a distinct responsibility to “lead the strategic development, organisation, management and delivery of library and knowledge services.”

The results emphasize the close connection between KM and strategy (Yi, 2008). Many ads suggested that strategic involvement in KM roles was proactive, which is similar to an increasing focus on strategy in LIS (Bryant, 2006; Corral, 2000; Government Knowledge and Information Management Network, 2009). The theoretical acceptance of strategy into LIS practice is demonstrated by the inclusion of this as a strand of the professional knowledge and skills base (CILIP, 2012a, 2012c). It suggests that KM or LIS activities must be embedded within strategy to be relevant and useful.

The language on strategy was frequently ambiguous. Some ads required a “strategic thinker,” but there was little indication of the attributes a “strategic thinker” might possess. These qualities might include engagement with organizational politics and the intellectual ability to develop a “vision” of a desired future state. This, like relationship management,

is connected to the intangible attributes required of KM professionals. These are difficult to demonstrate in a study of job ads, whose purpose as documents is limited (Bartram, 2000).

Involvement in strategy was associated with practical abilities in implementing and applying strategy, suggesting that strategic planning is meaningless without being implemented (Wu & Ping, 2008). Like the findings on technological solutions, there is an apparent balance between theoretical understanding and translation into practical solutions. The evidence in this study shows that KM workers are both “strategic thinkers” and “implementers.” There is possibly a tension between strategy and practical implementation, which might mean that KM roles are driven by competing priorities.

The results emphasize that a quality required within KM work is strong leadership (Pillania, 2008). The growing discourse on leadership in LIS suggests similarities between KM and LIS on this area (Evans, Ward, & Rugaas, 2000; Roberts & Rowley, 2008). It must be noted that empirical evidence contradicts this discourse, suggesting that professionals see leadership as a relatively unimportant skill (Howard, 2010). Leadership, like strategy, could be viewed as a set of generic skills that are not necessarily unique to LIS or KM. The role of leadership can be associated with intangible characteristics like emotional intelligence, sensitivity, and awareness (Higgs & Aitken, 2003).

*Global Interactions and Networks.* The results indicate that global context can shape the skills in a KM job. KM workers in two consultancy service companies were expected to have “experience of working in a Pan-European or Worldwide environment,” while another ad required the ability to “support European and global client work.” The global context of private sector organizations also means that KM workers are expected to have cultural awareness. One job was described as “high touch, requiring communications daily with colleagues across the US, India, Asia and Europe and therefore an appreciation of cultural nuances is essential.” Cultural awareness was highlighted by ads underlining the “ability to operate sensitively in multicultural environments” and the need to be “culturally sensitive/aware.”

Twenty-six job ads explicitly referred to the facilitation of “networks” and “communities.” These were focused on the facilitation of collaborative environments, which is a possible reason for the value attached to skills with Web 2.0 and social media. A knowledge management engineer post aimed to “increase network connectivity between internal and external environments.” Networks enabled knowledge sharing, with a knowledge broker job in consultancy services seeking an individual who “promotes the knowledge champion and/or subject matter expert network with the broader firm, namely ensuring expertise can easily be identified.” A similar post of knowledge manager stated that its role was to “establish, develop and manage subject matter expert networks.”

**CONCLUSION**

The results have shown that there are numerous skills shared between LIS skills frameworks and KM job ads. These principally affect the areas of managing content, developing services, and responding to organizational context. There are clearly skills areas that appear very specific to KM and LIS, which include the creation of metadata and taxonomies, the expert use of technology, and the provision of “expert advisor” services.

Figure 4 demonstrates the skills shared between KM and LIS (indicated in the top-right quadrant), and speculates as to the position of skills that are not shared (indicated in the top-left quadrant).

The shared skills between KM and LIS support Zhang’s (2008) study, which found that LIS has the potential to attract professionals from a wider range of disciplines. There is still an outstanding question around what skills, competencies, or attributes are unique to LIS as opposed to KM. There is also a debate around “transferable skills” like communication, with IFLA’s (2003) guidelines emphasizing such skills. This suggests that there should be a distinction made between personal skills, generic skills, and discipline-specific knowledge, highlighted in Howard’s (2010) study.

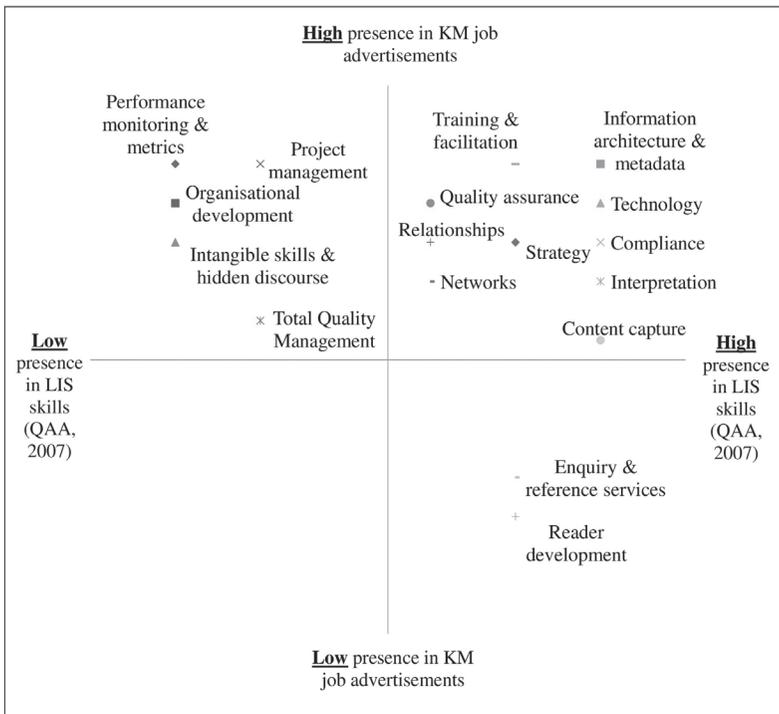


Figure 4. Matrix comparing KM and LIS.

KM and LIS share a strong focus on the holistic nature of managing information and knowledge. The job ads supported the roles of “identifying, creating, acquiring, organising, retrieving, preserving and disseminating information” (QAA, 2007, p. 1). Many job ads described tasks that involved various phases in the “lifecycle” of content, showing that KM contributes to a continuum of information and knowledge.

The holistic characteristic of both KM and LIS is evidenced by the integration of a broad range of skills, competencies, and attributes. KM workers are expected to be technical experts capable of working with new technology but are also expected to establish relationships and contribute to strategy. The discussion showed that KM workers are both “strategic thinkers” and “implementers” with evidence that employers expect both qualities in abundance.

KM workers have the key role of being “integrators” who can synthesize technology, people, politics, and culture to achieve a strong knowledge environment. A responsibility that has not been discussed in depth here is the role of managing change in an organization, particularly when there is resistance to new ways of working (McManus & Loughridge, 2002). This suggests that individuals in KM roles have a strong strategic role in organizations and exert a degree of political power.

This study has indicated that there might be an invisible subtext, which includes intangible attributes and characteristics (Grungig, 1993). A key intangible is self-confidence, particularly in relation to strategy and relationship management. Confidence is a rarely discussed attribute in LIS, as it is not a “skill” in a typical sense, and is more about a professional’s personality. There is a subtext that might be described as emotional intelligence, demonstrated in the ability to listen to colleagues and be able to build up strong relationships across an organization. There is a strong argument that being able to read emotions and understand others is important to relationship management and effective leadership. Given the scope of the current study, this is a speculative finding requiring fuller substantiation in future research.

The study’s results and discussion have shown that the method of analyzing job ads is an inherently flawed method. This is because job ads perform a very specific and limited function as documents. The method of analysis deployed in this study is limited because the focus has been on identifying convergence across job ads, whereas it could be argued that divergence between the ads would better support comparative analysis. Nonetheless the current study has value in being a U.K.-based study, which uses relatively deep analysis in a research field on KM job roles that is not yet fully developed.

### Implications

Further research could deploy methods to investigate competencies in context (Rehman et al., 1993), which might include “contextual inquiry” (illustrated by Attfield et al., 2010) or case studies (Garcia et al., 2011). The foci of future studies could shift to less measurable attributes like emotional intelligence and self-confidence or the tensions between the theoretical and practical elements of KM. A particular paucity in current research is how KM and LIS actually differ and where divergence exists between the two areas.

The implications for policy and practice are that practitioners should be able to articulate the skills areas they can offer to KM, which is useful in identifying career openings and writing job applications. Line managers should reconsider the training and CPD offered to staff, particularly in the light of less tangible areas like relationship management. On curricula, library and information schools should consider whether content should refocus on skills that are increasingly required in KM.

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