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JOB FUNCTIONS AND REQUIREMENTS FOR KNOWLEDGE MANAGERS: LESSONS FOR LIBRARY AND INFORMATION SCIENCE (LIS) SCHOOLS IN SOUTH AFRICA

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ABSTRACT

The study explored the job functions and requirements for knowledge management practitioners through the analysis of job advertisements appearing on 12 major jobsites in South Africa. It aimed to provide vital information that can assist in re-examining knowledge management education in library and information science (LIS) schools in South Africa. A total of 32 knowledge management-related job advertisements were retrieved using “knowledge” and “knowledge management” as search terms. Details regarding the date and location of the advertisement, job requirements (i.e. qualification, skills, knowledge, experience and attitude) and, most importantly for the purpose of this study, the job functions (i.e. responsibilities, duties, description) were captured from the advertisements and analysed. The majority of the jobs were based in Gauteng with a few based in KwaZulu-Natal and Limpopo. The findings revealed that a variety of job titles are used to refer to knowledge management practitioners, with “knowledge manager” appearing in a majority of the advertisements. Taking into account the multidisciplinary nature of knowledge management, there was diversity in terms of the qualifications required. Some of the common job functions or responsibilities listed in the advertisements were designing and executing a knowledge management strategy, identifying knowledge and information needs, conducting research, conducting knowledge audits, and developing, implementing and maintaining knowledge repositories/databases. The study recommends that LIS schools should endeavor to align their offerings to market requirements so that their graduates may have the required academic qualifications, knowledge, skills and attitudes. Areas of further research are recommended.

KEYWORDS

Bibliometrics, content analysis, information professionals, knowledge management, knowledge workers, South Africa

1 INTRODUCTION

In order for library and information science (LIS) professionals to engage more successfully in the knowledge management (KM) arena and to maximise their prospects for success in what is a very competitive field, an insight into the job functions and requirements in demand is critical. Gaining insight into these job requirements and functions is made more important by the diverse approaches in KM and the multidisciplinary nature of the concept. In view of this, this article aims to establish the job functions and requirements for KM practitioners through the analysis of job advertisements appearing on 12 major jobsites in South Africa.

The growth and prevalence of KM is largely attributed to the evolution of a knowledge society (Hannula, Kukko & Okkonen 2003; Hazeri & Martin 2006; Kumar 2010:24; Sinotte 2004:191) in which organisational assets are intangible and tied up in the knowledge, skills and capacity for innovation of its employees (Hazeri & Martin 2006). In addition, competitive advantage is based on the creation of knowledge and its effective management and use. Knowledge is also valued highly because it is closer to action (McInerney 2002). Although not widely discussed, one additional factor that bears mentioning is the current aging demographic of employees (Hazeri & Martin 2006). The authors argue that organisations are realising that a large proportion of their most important age group – with a vast amount of knowledge – is on the verge of retirement. Therefore, there is a growing awareness that if measures are not taken, this vast quantity of vital knowledge and expertise could be lost. Moreover, the impetus for the emergence of a knowledge focus in organisations, and its subsequent development through knowledge management theory and practice, emerged out of the realisation that knowledge is a strategic asset of capital value in organisations, individuals, corporations and nations (Choo & Bontis 2002; Davenport & Prusak 1998). The increasing complexity of the environment in which organisations operate, combined with the demands of customers and the pressure for innovation and competition, makes knowledge central to businesses' success today. Knowledge is now seen as a factor of production not only on par with land, labour and capital, but surpassing them in importance. As a result, both knowledge and its management have become fundamental strategic resources of organisations (Dulipovici & Baskerville 2007).

KM has attracted enormous attention from a number of disciplines over the years, including LIS. Understandably, various disciplines have influenced and informed KM thinking. For example, philosophy in defining knowledge; cognitive science in understanding knowledge workers; social science in understanding motivation, people, interactions, culture and the environment; management science in optimising operations and integrating them within the enterprise; information science in building knowledge-related capabilities;

knowledge engineering in eliciting and codifying knowledge; artificial intelligence in automating routine and knowledge-intensive work; and economics in determining priorities (Kakabdse, Kakabadse & Kouzmin 2003). This multidisciplinary nature of KM has drawn inputs from people in different fields, including economists, human resource professionals, information technology professionals, and LIS professionals (Sarrafzadeh 2005:93). Sadly, it is this multidisciplinary nature of KM that has also brought about competing ownership claims of supremacy over the subject among the disciplines involved. This factor (i.e. the multidisciplinary nature of KM) also accounts for the broad range of viewpoints and approaches in the field of KM (Sinotte 2004:191) which, we believe, is also reflected – or manifests itself – in the job market.

2 DEFINING KNOWLEDGE MANAGEMENT

The growth of KM, both as a research theme and an organisational strategy, has gained significant traction throughout the past decade (Chua 2009). However, despite this growth, there is no consensus among KM scholars and practitioners on what constitutes the concept. As such, there is no universally agreed definition of KM (Onyanha & Ocholla 2008:1). Given this lack of conceptual consensus, KM is termed “nonsense” in some quarters (Wilson 2002). Noticeably, defining the scope of KM remains one of the unresolved issues in the KM discourse. This is evident from the variety of definitions that have been put forward to describe the term. Table 1 gives a list of some definitions selected from extant literature.

Table 1: Selected definitions of KM

| Definition of knowledge management | Author (s) |
|---|---------------------------|
| Knowledge management in its broadest sense is a conceptual framework that encompasses all activities and perspectives required to gain an overview of, deal with, and benefit from the corporation’s knowledge assets and their conditions. | Wiig (1993) |
| Knowledge management addresses the generation, representation, storage, transfer, transformation, application, embedding, and protecting of organisational knowledge. | Hedlund (1994) |
| Knowledge management is mainly concerned with the development and exploitation of the knowledge assets of an organisation, with a view to furthering the organisation’s objectives. | Davenport & Prusak (1998) |
| Knowledge management is the identification, optimisation and active management of intellectual assets, either in the form of explicit knowledge held in artefacts or tacit knowledge possessed by individuals and communities. | Snowden (1998) |
| Knowledge management is the identification, acquisition, utilisation, support, maintenance and disposal of knowledge assets for the purpose of adding value and benefiting all stakeholders. | Rowley (1999) |
| Knowledge management involves the identification, organisation, dissemination and use of this knowledge to generate value in the achievement of the organisation’s objectives. | Luen & Al-Hawamdeh (2001) |
| Knowledge management is a strategy that transforms organisational intellectual goods into higher productivity, new values and competitiveness increase. | Murray (2001) |

As can be seen in Table 1, although there are numerous subtly different definitions of KM, they all share three common features. Firstly, KM is an organisational strategy to enhance competitiveness; secondly, it is a systemic process of leveraging the organisation's intellectual assets; and thirdly, KM involves the process of identifying, capturing, sharing and creating organisational knowledge.

3 RELEVANCE OF KM IN LIS

We believe that KM is still a rapidly developing area within which LIS professionals have a critical role to play. Since its emergence and conception in the 1990s (Jacobs 2004; Ondari-Okemwa & Minishi-Majanja 2007; Ponzi 2002), KM has received significant attention from LIS. It is now a major feature in LIS discourse and a major theme in various LIS conferences. For instance, in South Africa, the major conferences that immediately come to mind are those that are hosted annually or biennially by organisations such as the Library and Information Association of South Africa (LIASA), Progress in Library and Information Science in Southern Africa (ProLISSA), the University of Johannesburg (Department of Information and Knowledge Management), the University of Stellenbosch [International Symposium on the Management of Industrial and Corporate Knowledge] (ISMICK), the University of Zululand (Department of Information Studies Annual Conference), and the University of South Africa (Annual Research Symposium). As if they have heeded calls from several authors such as Koenig (2005), Martin, Hazeri and Sarrafzadeh (2006), and Srikantiah and Koenig (2000) for LIS professionals to take full advantage of the emerging opportunities in knowledge management, LIS schools have incorporated KM into their curricula, and some have even amended their names to reflect this change. For example, the Department of Information and Knowledge Management at the University of Johannesburg changed its name from the Department of Information Science.

A number of authors in the LIS field have commented about the relevance of KM for LIS professionals. Some of them, such as Ganguly (2007), have gone so far as to vehemently claim that the management of information and knowledge has long been regarded as the domain of LIS professionals, as librarians and information professionals are formally trained in identifying, selecting, organising and disseminating information and knowledge to users. Onyancha and Ocholla (2009), citing LIS professionals and writers, observe that KM is an extension of what LIS workers have always done, namely managing information (including records management). Chen, Snyman and Sewdass (2005:2) observe that "in many cases, KM is being used simply as a synonym for information management". The authors further observe that "some organisations have been under the impression that they were implementing KM, whereas they were actually implementing document management or information management" (Chen, Snyman & Sewdass 2005:2). It has also been observed that, although there are some differences between information management and knowledge management, the two concepts are similar in some ways (Al-Hawamdeh 2003; Chen, Snyman & Sewdass 2005:2; Read-Smith, Ginn, Kallaus, Fosegan, Logan & Schneiter 2002). Together with document management, information management and knowledge management are "similar

in that the three approaches contribute to business efficiency and effectiveness; consider the processing of information in some ways; use information technologies as enablers; and require skilled and knowledgeable workers” (Chen, Snyman & Sewdass 2005:14).

We, however, believe that knowledge management goes beyond identifying, selecting, organising and disseminating knowledge. It is mainly concerned with the development and exploitation of the knowledge assets of an organisation, with a view to furthering the organisation’s objectives (Davenport & Prusak 1998). This fact points to a number of potential deficits in the skills of LIS professionals that would inhibit the maximisation of the contribution that they could make in knowledge management initiatives. These are highlighted by St Clair (2001) and DiMattia and Oder (1997), and include lack of organisational political understanding, unwillingness to address issues of return on investment, insufficient understanding of business practices, and limited access to high-level decision-making. This article, although not an advocacy for LIS professionals’ involvement in KM, aims to bring to the attention of LIS professionals the skills and knowledge required for knowledge management jobs.

4 METHODOLOGY

The study adopted a content analysis approach to scan through KM job advertisements appearing in twelve major Internet-based jobsites in South Africa (see Table 1). Welman, Kruger and Mitchell (2009:221) define content analysis simply as a “quantitative analysis of qualitative data” whereby “the basic technique involves counting the frequencies and sequencing of particular words, phrases or concepts in order to identify keywords or themes”. Palmquist (in Onyancha and Ocholla 2009b:93) opines that content analysis is used to “determine the presence of certain words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner” where texts are defined as “books, book chapters, essays, interviews, discussions, newspaper headlines and articles, historical documents, speeches, conversations, advertising, theatre, informal conversation, or effectively any occurrence of communicative language”.

These websites were chosen on the premise that they are widely used in South Africa by various organisations and agencies to advertise job vacancies in the country. The terms “knowledge” and “knowledge management” were used as search terms to retrieve relevant records. The term “knowledge” was used mainly because it broadened the scope of the search to include other job titles with the word ‘knowledge’. The authors acknowledge that the term “knowledge management” was limiting in some instances, especially if the website allowed searching within the job titles only. However, the authors observed that the search using the two terms resulted in the retrieval of advertisements that not only contained the search terms within the titles but also within the body of the advertisement. Each of the terms was used separately to retrieve knowledge management job vacancies from the aforementioned jobsites.

Table 2: Data sources

| Website | Number of adverts |
|------------------------------------|-------------------|
| http://www.careerjet.co.za | 15 |
| http://www.indeed.co.za | 9 |
| http://www.wowjobs.co.za | 0 |
| http://www.bestjobs.co.za | 1 |
| http://www.jobmail.co.za | 1 |
| http://www.careerjunction.co.za | 3 |
| http://www.pnet.co.za | 2 |
| http://www.careerweb.co.za | 0 |
| http://www.jobportal.co.za | 0 |
| http://www.jobcrystal.co.za | 0 |
| http://www.recruitmentdirect.co.za | 0 |
| http://www.careers24.co.za | 1 |
| Total | 32 |

The relevant advertisements were retrieved and captured onto a spreadsheet constructed using Microsoft Excel. A total of 48 job vacancies were retrieved from the 12 jobsites and, upon cleaning the data of duplicates and irrelevant records, a total of 32 job vacancies were obtained for analysis. The list of those websites and the number of advertisements retrieved from each can be seen in Table 2 above. Data cleaning was considered desirable as some job advertisements appeared on multiple jobsites. Advertisements with similar job titles, job descriptions, qualifications and work experiences were identified and carefully examined to remove duplication. Job advertisements with very brief job descriptions were removed as it was difficult to determine their suitability for analysis. The 32 advertisements were analysed for details regarding the location of the advertised job and job specifications and requirements in terms of qualifications, experience, knowledge, skills and attitudes. A similar method (analysing job advertisements) was also preferred by Morris (2001) when assessing the opportunities for LIS students in the KM job market. Although her study focused on analysing job advertisements appearing in newspapers, similar to this study, the advertisements were analysed in terms of job functions and requirements. Newspaper scanning has also been conducted elsewhere by Snyman (2000) and Ocholla (2001) with significant success for determining national LIS education and training needs and the job market requirements. Mining of key terms from the text was conducted using TextStat software which generated the frequencies of occurrence of specific terms within the text. In view of the fact that “specific concepts or variables in qualitative texts cannot necessarily be studied in a quantitative way only because these concepts or variables may have quite different meanings when relationships between the concepts are taken into account” (Welman, Kruger & Mitchell 2009:221), it was necessary to conduct further analyses to check for relationships between terms used to describe the functions and responsibilities of knowledge workers. In that respect, a

core/periphery model and social network analysis techniques were used to find the most common keywords that are used to describe KM job requirements (see Figures 1 and 2).

5 RESULTS

The results are presented under the following headings: general information, job details (e.g. title, description etc) and job requirements (e.g. academic qualification, experience, skills, knowledge, attitude, etc).

5.1 GENERAL INFORMATION

In total 32 job advertisements were analysed according to the website in which the advertisement appeared. It was observed that most job advertisements appeared in *careerjet.co.za* followed by *indeed.co.za* (9), *careerjunction.co.za* (3) and *pnet.co.za* which yielded a total of two job advertisements. In terms of location, most jobs (20) were based in Gauteng province, followed by KwaZulu-Natal (8) and Limpopo (4). There were no knowledge management-related jobs based in other provinces. The pattern of distribution of job advertisements according to provinces can be attributed to the fact that Gauteng is the economic hub of South Africa. Besides the province comprising two major cities (i.e. Johannesburg and Pretoria), it is also home to the capital city of South Africa.

5.2 JOB DETAILS

The job details contain job title and description. These are discussed below.

5.2.1 Job title

Generally, a job title indicates what the job entails. When reading a job title, one is able to discern what the job involves. Although misleading at times, job titles are important indicators of what the job entails. Out of the 32 KM jobs analysed, the title ‘knowledge manager’ appeared in nine (28.1%) advertisements, followed by ‘knowledge management professional’ which appeared in a total of five (8%) records.

Table 3: Job titles (N=32)

| Job Title | Frequency | Percentage |
|--|-----------|------------|
| Knowledge manager | 9 | 28.1 |
| Knowledge Management Professional | 5 | 15.6 |
| Knowledge Management Manager | 3 | 9.4 |
| Knowledge and Information Architect | 3 | 9.4 |
| Assistant Director: Knowledge Management | 2 | 6.3 |
| Consumer and Market Knowledge Specialist | 2 | 6.3 |
| Executive Manager: Knowledge Practices and Consulting Services | 2 | 6.3 |

| | | |
|---------------------------------|----|-------|
| Knowledge Management Specialist | 2 | 6.3 |
| IT and Knowledge Manager | 1 | 3.1 |
| Knowledge Assistant | 1 | 3.1 |
| Knowledge Management Consultant | 1 | 3.1 |
| Knowledge Practitioner | 1 | 3.1 |
| Total | 32 | 100.0 |

The distribution pattern of the records according to job titles for the rest of the advertisements was as follows: ‘knowledge management manager’ (3, 9.4%), ‘knowledge and information architect (3, 9.4%), ‘assistant director: knowledge management’, ‘consumer and market knowledge specialist’, ‘executive manager: knowledge practices and consulting services’ and ‘knowledge management specialist’, which yielded two (6.3%) records each.

5.2.2 Job description

A job description is essential for determining training and education needs (Ocholla 2005:6). Generally, a job description outlines the activities/duties/responsibilities attached to a job. If the aim is to train employable graduates, then these are critical for identifying key areas to be addressed in the curriculum. Job descriptions for each job were generally descriptive and numerous. As a result, including all of them would take a lot of space. However, an effort was made to group them according to related themes appearing across job descriptions in all advertisements. The general themes visible in most advertisements included designing and implementing a knowledge management strategy, identifying knowledge and information needs, conducting research and knowledge audits, developing, implementing and maintaining knowledge repositories/databases, promoting knowledge sharing, building strong networks, designing and implementing a knowledge management policy, etc. Other common descriptions included the following:

- Capture, organise, manage, share and leverage the collective intellectual capital.
- Analyse competitor activities.
- Audit and analyse current KM system.
- General professional support to co-workers, including but not limited to training and use of the data bases.
- Manage, build and maintain the knowledge management solution.
- Provide support for the establishment and nurturing of communities of practice, including workshops, one-on-one guidance and troubleshooting.
- Help project identify best practices from own project experience and add them to the best practices compendium.
- Establish consultation process for identifying and cataloguing best practices and lessons learned.
- Support the development of a knowledge and information <word missing>.

(*establishment, nurturing, troubleshooting, and workshops*); cluster C (*delivery, engagement, forecast, plan, profitability and revenue*); cluster D (*dissemination, process, design, access, data, consultation, and KM*); and cluster E (*consumers, repositories, banking, activities, local, markets, and documents*); and cluster F (*teams, seamless, external, internal, tools, monitor, processes, work, exchanges, and facilities*).

A normalised count analysis, which is commonly used to reflect the strengths of association in a pair of terms, revealed that the strongest co-occurrence of terms was registered between *ability* and *service* (0.667) followed by *ability* and *standard* (0.577); *promote* and *sharing* (0.572); *sharing* and *organisation* (0.572); *ability* and *products* (0.535); *ability* and *manage* (0.523); *ability* and *projects* (0.504); *sharing* and *collaborative* (0.492); and *ability* and *nationally* (0.471).

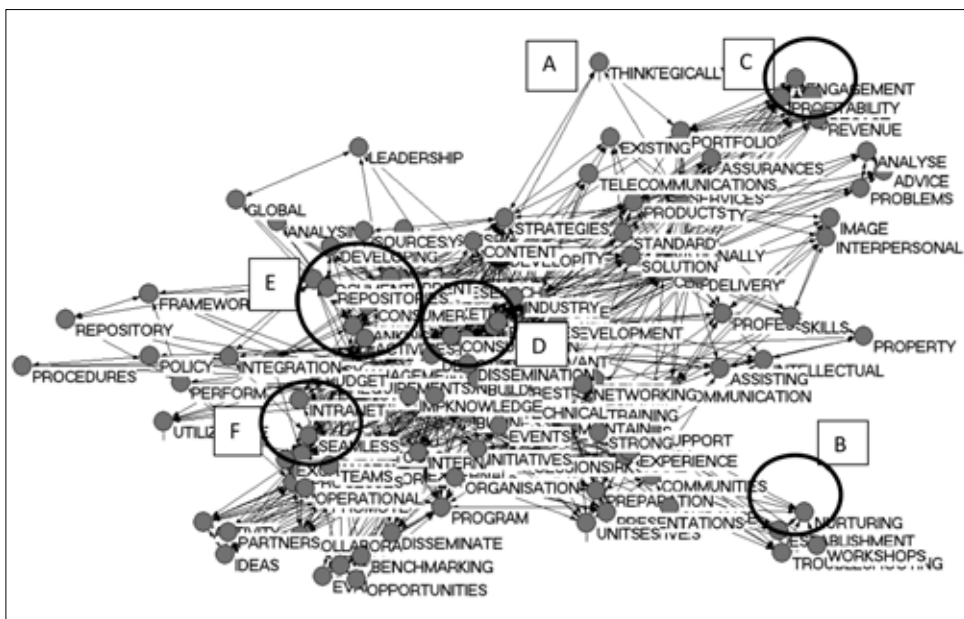


Figure 2: Social network and cluster analysis of job description terms

5.3 JOB REQUIREMENTS

Job requirements comprise the academic qualifications, knowledge base, skills, attitude and experience of the candidates, as presented below:

5.3.1 Academic qualifications

In terms of academic qualifications, most jobs (25) required a bachelor's degree while two advertisements required an Honours and a Master's degree respectively. Five of the job advertisements did not spell out the qualifications required. Table 4 reveals that there was diversity in terms of areas of study (disciplines). The majority of the jobs preferred Business Science (8), followed by Knowledge Management (5), Social

Science (4) and Information Science (3). A surprise inclusion was an LLB qualification which may imply that KM cuts across disciplines to include legal studies as well.

Table 5: Areas of study (N = 32)

| Discipline | Frequency | Percentage |
|---|-----------|------------|
| Statistics | 2 | 6.3 |
| Psychology | 2 | 6.3 |
| Marketing | 2 | 6.3 |
| Commerce/Business Science | 8 | 25.0 |
| Social Science | 5 | 15.6 |
| Information Science | 3 | 9.4 |
| Knowledge Management | 6 | 18.8 |
| Information Technology/Computer Science | 3 | 9.4 |
| LLB | 1 | 3.1 |
| TOTAL | 32 | 100.0 |

5.3.2 Required knowledge

This aspect was not visible in most advertisements, perhaps on the premise that the job description, qualification and skills required would indicate the knowledge required as well. In the few advertisements that included this aspect, grounded knowledge of the subject domain of information and knowledge management was the main requirement. This observation is in contrast with the subject of the qualifications expressed above under ‘academic qualification’. Whereas it was revealed that the academic qualification in terms of subjects of study was multidisciplinary, the same cannot be said of the required knowledge. This scenario can be attributed to the fact that the said knowledge has been expressed in the subject areas of academic qualifications.

5.3.3 Skills

Most advertisements did not include information about the required skills. In the few that did, strong communication (both oral and written) was the most preferred skill. Also featuring strongly were presentation skills, computer skills, problem-solving skills and teamwork and interpersonal skills. Others included entrepreneurial, organisational and document management, project management, administrative and management, and policy and diplomacy skills.

5.3.4 Attitudes

Attitude involves the candidate’s personal attributes that are required for a job. As was the case with the required skills, the attitudes required for KM jobs were not included in some of the advertisements. Among those that included this aspect, the dominant attributes included emotional resilience, analytical thinking with attention to detail, ability to work under pressure, results driven, honesty and integrity, ability to work in a team, and willingness to learn and adapt. Others included:

- Decisive judgement
- Drive for results
- Logical reasoning
- Persuasive negotiator
- Proven ability to work independently
- Courage
- Energy and drive
- Analytical thinking
- Proactive
- Self driven, motivated individual
- Client focused attitude
- Quality oriented.

5.3.5 Experience

Previous working experience in terms of years and specific areas was relevant and required in most jobs. This varied across job advertisements, with the majority requiring a minimum of two years and a maximum of ten. With regards to areas of experience, a requirement for previous experience in a knowledge management capacity was prevalent in all advertisements. These included previous experience in establishing effective partnerships within and outside the organisation, developing and delivering knowledge sharing programmes and, with the information infrastructure, learning and knowledge sharing experience.

6 DISCUSSION OF RESULTS

The results based on the data obtained from advertisements, that is 32 job vacancies appearing on 12 major jobsites in South Africa analysed for this study, provide a glimpse of the job requirements (e.g. qualifications, skills, knowledge, attitude, experience, etc) and details (e.g. titles and description) of knowledge management practitioners, at least as far as the industry is concerned.

We believe that job titles are very important as they define a job, that is, what the job entails. The results of the study show that there is diversity in terms of the job titles used for knowledge management vacancies. This indicates that the roles in the knowledge management sector are wide ranging with many different job titles used to describe them. Noticeably, all 32 job titles contained the word “knowledge” – for example, “*Knowledge and Information Architect*”, “*Knowledge Management Consultant*”, “*Knowledge Management Specialist*” and so on. The majority (9 or 28%) of advertisements contained “*Knowledge Manager*” as a job title. This pattern was not surprising because we used search terms that contained the term *knowledge* to search for job advertisements related to knowledge management. An examination of some of the websites of departments offering KM as a qualification in South Africa (e.g. the Department of Information and Knowledge Management at the University of Johannesburg (UJ) in South Africa)

reveals that job titles related to knowledge management are becoming refined and therefore universal. For instance, this department at UJ outlines the possible careers of their graduates as follows: information manager, records manager, business intelligence analyst, information consultant, knowledge manager and information broker (University of Johannesburg Department of Information and Knowledge Management 2010). It was noted that these titles resonated well with the global trend of assigning certain titles to knowledge practitioners.

Given the fact that the study endeavored to utilise its results to inform and advise knowledge management education and training in the field of LIS in South Africa, the job descriptions were viewed as important because they are essential in determining training needs. Generally, job descriptions are narratives with the aim of fully outlining the activities/duties/responsibilities attached to a job. From the advertisements analysed, most job descriptions centered around designing and implementing a knowledge management strategy; identifying knowledge and information needs; conducting research; conducting knowledge audits; developing, implementing and maintaining knowledge repositories/databases; promoting knowledge sharing; building strong networks; and designing and implementing a knowledge management policy. We can safely conclude that knowledge management jobs in every organisation are unique, as reflected in the aforementioned knowledge management roles (Abell & Oxbrow 1999). It should be noted, however, that these roles have a variety of job titles with varying definitions.

In terms of job requirements, most jobs (25) required a bachelor's degree, with only two requiring an Honours (1) and a Master's degree (1). It was noted that none of the job advertisements required a PhD qualification, perhaps because 1) KM is a relatively new concept and function and the industry may thus have been requiring a qualification rare in the field, had it insisted on PhD qualification and/or 2) the PhD qualification might be looked at as being too high a requirement for the job of a knowledge manager. However, just like in any other growing sub-field or field, KM may soon require employees with PhD qualifications. There was variety in terms of areas of study with the majority of the jobs requiring a qualification in Business Science (8), followed by Knowledge Management (5), Social Science (4) and Information Science (3). We believe that the multidisciplinary nature of knowledge management accounts for the diversity in terms of the areas of study preferred for knowledge management vacancies. Furthermore, this diversity may be attributed to the fact that knowledge management is still an emerging discipline and, as such, there is no standard and widely accepted competency framework for KM professionals available (Luthra 2008). Notably, only three advertisements required a qualification in Information Science. Could it be that organisations view the LIS profession to have had little impact on knowledge management in organisations, as concluded by Abell and Oxbrow (1999)? Further, the authors mention that some organisations see a limited involvement for LIS professionals, despite the development of imaginative and relevant courses in LIS academic departments, because of their perception of a profession that seldom engages with the business. Even though there may be substance to these claims, we believe that, generally, the qualifications required are a reflection of the advertiser's perception of knowledge management and not necessarily

that information professionals have a limited role in knowledge management. The involvement of LIS scholars in KM is also reflected in a study conducted by Onyancha in 2011. Onyancha (2011) found that a majority of the study leaders of Master's and PhD projects conducted in South Africa are LIS scholars or researchers a situation that may lead us to conclude that the field of LIS has a lot to offer in the development of KM.

A number of skills were required for knowledge management vacancies. Strong communication (both oral and written), presentation and computer skills were emphasised in most advertisements. The other skills required included problem solving skills, teamwork and interpersonal skills, entrepreneurial skills and project management skills. These are in line with the skills identified by research on this subject, funded by the Library and Information Commission and conducted by Abell and Oxbrow (1999). Outlining the main conclusions of the project, Abell and Oxbrow (1999) state that communication is at the heart of the knowledge management environment, as verbal, written and presentation skills are required in order to influence, persuade, negotiate and share knowledge. Most jobs required a positive attitude with emphasis on: emotional resilience, analytical thinking with attention to detail, ability to work under pressure, results driven, honesty and integrity, ability to work in a team as well as willingness to learn and adapt. In terms of experience, two to ten years' experience was emphasised in all advertisements. This shows the longevity of knowledge management practices in any given organisation. In addition, most jobs required previous working experience in knowledge management.

7 CONCLUSION AND RECOMMENDATIONS

This study concludes thus:

- Knowledge management job requirements vary from one institution and sector to another, probably due to the multidisciplinary nature of KM.
- There are a variety of job requirements for knowledge managers in terms of academic qualifications, required knowledge, skills, attitudes and experience.
- The majority of KM jobs require people with the ability to develop and manage projects as well as inject new ideas, all for the purpose of ensuring high-quality services and products. This was reflected mainly through the core/periphery analysis of the data as presented in Figure 1.
- Among the processes of knowledge management most emphasised in the job advertisements was knowledge sharing, thereby according the process prominence in the advertising organisations.
- The areas of study required of knowledge managers cut across many disciplines, including statistics, psychology, marketing, commerce/business science, social science, information science, knowledge management, information technology and/or computer science and law.

In conclusion, we believe that although the data collected may not be representative of the job requirements for knowledge managers, given that there were only 32 job advertisements, the requirements may shape the LIS curriculum and offerings as far

as knowledge management is concerned. LIS schools should endeavour to align their offerings to market requirements so that their graduates may have the required academic qualifications, knowledge, skills and attitudes. Another area that may be of help to students to adapt well to the working environment is experiential training. LIS schools may want to include this aspect in their education and training programmes.

Further research is required to expand the study beyond online jobsites to include such sources of data as newspapers and other advertising media agencies. Given that the search was limited to the keywords 'knowledge' and 'knowledge manager', it is recommended that further research that will broaden the search to include other search terms be conducted in order to gain more insight into the types of jobs that exist in KM, as well as their requirements.

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