

¹ANALYZING CORPORATE JOB MARKET FOR DEVELOPING INFORMATION AND KNOWLEDGE PROFESSIONALS: THE CASE OF A DEVELOPING NATION

Sajjad ur Rehman

Department of Library and Information Science,
College of Social Sciences, Kuwait University, Kuwait
e-mail: rehman05@gmail.com

ABSTRACT

The paper presents the case of a developing nation—Kuwait—for analyzing its corporate job market for developing and knowledge professionals. The paper is based on the analysis of a body of research that has cumulated over the last 5-6 years. These studies were focused on the status of information management operations in Kuwaiti corporate companies, manpower and organizational issues related to information technology (IT) and information professionals, information management activities of finance companies, and information and knowledge management education. It has been noted that this corporate market is aggressive in pursuing strategic initiatives in employing latest technologies and management approaches. These organizations also appear to be in need of qualified human resources, equipped with befitting competencies, who can assume key managerial and professional roles for information and knowledge positions. There is also a need for creating meaningful partnerships between industry and trade and the higher education institutions, which might be instrumental in designing suitable programmes of education and training in information and knowledge management. Based on these findings, this paper analyses the needs of the corporate job market of Kuwaiti corporate sector for the areas of information and knowledge management. Strategies for developing appropriate competencies have also been outlined.

Keywords: Information management; Knowledge management; Competencies; Human resource development; Corporate job market; Kuwait

BACKGROUND

The role of information and knowledge professionals in corporate organizations has been fast changing. Also, a great deal of flux is evident in the job market in regard to demands for new competencies for information and knowledge professionals. In

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response to these uncertainties and pressures, these professionals are expected to be equipped with new sets of capabilities in order to effectively perform in specialized domains. Likewise, there is a strong need that their capabilities are continually developed. Gordon (2002) discussed the importance of employment of information professionals in companies and argued that the organizations would run the risk of sub-optimal use of information and even the risks of destruction of information resources due to the absence of professionals.

The emerging job market for information and knowledge professionals requires that they have fresh competencies. That in turn places new pressures on the higher education institutions that are responsible to produce these professionals, implying the need for intensive curricular changes. Analyses of job market present the opportunity to articulate new competencies. The British Library Research and Innovation Centre was engaged in a comprehensive study to identify the current and emerging positions of information managers in banking, pharmaceutical and information provision industries. Stenson, Raddon and Abell (1999) conducted this study and they also profiled the skills and competencies needed for first and second jobs in these sectors. They also examined how far academic departments were including these skills in their academic programmes and curricula.

Curriculum needs to be conceived in relation to market needs and employer perceptions about the competencies of professionals. Elaborate methods of competency definition and validation have been developed and applied in the fields of education, librarianship and information studies. Employers' perceptions have also been applied for the configuration of market needs and curriculum design (Rehman 2003b). Since job market has a peculiar context, there is a need to analyse these trends and patterns in a particular situation.

PROBLEM

During the last few years, a number of studies have been conducted that deal with the phenomena of changing corporate environment, employer and managerial perceptions about their expectations of information professionals, and response of the higher education institutions to producing graduate equipped with new competencies. Researchers have been analyzing the needs of the information market in order to configure desired competencies of information professionals, which could provide new directions for academic programs and curricula of library and information science. Academic and professional bodies such as Special

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Libraries Association, Medical Library Association, and Association for Library and Information Science Education have been engaged in surveys to assess the extent to which current curriculum offers the kind of training the students need to develop their knowledge, understandings and skills (Taylor 1998). Middleton (2003) conducted a study of the Australian market and identified a list of 179 skills grouped into six areas of competencies. Using competency framework, Rehman (2003) proposed a model of curriculum development, taking into view the input of employers, professionals and academics. A number of studies have used the competency model to identify curriculum content for general professionals and those who are working in specialized domains of academic, public and special libraries (Rehman, Majid and Abu Baker 1997a, 1998 and 1999; Rehman, Abu Baker and Majid 1997b and 1998). Buttlar and DuMont (1996) who conducted a major survey of 736 alumni of the schools in North America for 55 competencies, found that five competencies ranked most frequently as essential were: knowledge of sources, collection management skills, conducting reference interviews, communicating effectively in writing, and the ability to apply critical thinking.

There is a need to analyse the findings of this body of research so as to develop an understanding about new roles and competencies of information and knowledge professionals in the job market and the demands these ground realities place on the higher education institutions for producing a new breed of professionals. Such an analysis needs to be conducted in national context and this paper is based on the research findings of studies conducted in Kuwait.

PURPOSE

The purpose of this paper is to analyse the needs of the job market of Kuwaiti corporate sector in the areas of information and knowledge management. For this purpose, an analysis of the existence or non-existence of information and knowledge activities in these organizations provides the parameters for delineating market needs. This paper attempts to identify such competency modules that are needed for producing information and knowledge workforce. The supplementary purpose of the paper is to propose strategies for introducing information and knowledge management programmes in Kuwaiti higher education institutions at both the undergraduate and graduate levels.

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ANALYSIS OF MARKET NEEDS

This paper analyses market needs based on the following three studies conducted during the last five years. These are expected to provide an insight into the prevalent patterns of IT and information operations, human resources, and overall needs for future developments.

(a) IT & Information Operations in Kuwaiti Companies

Data collection for the first study, conducted by Rehman (2001), was done in 2000-01 and two sets of findings were reported in 2002 and 2003 papers. In one of these papers, Rehman and Marouf (2003a) examined the spectrum, content and extent to which IT and information operations were performed in 39 Kuwaiti companies, based on the premise that preparation of information workers had to be based on a clear understanding about the conduct of these operation. They interviewed one of the managers or executives of the companies, using an instrument that contained 19 statements of IT and information operations organized in four groups of information needs and use, IT systems, IT and information applications, and management of information activities. They found that most of these companies were engaged in a number of activities of determining user needs and collecting, organisation, servicing, packaging, searching and retrieving information from formal and structured information sources. They noted little activity about the use of Web technology, Internet utilities, and management of internal information sources of these companies.

Based on the same study, Marouf and Rehman (2002) examined if there existed any differences between the current practices of 39 Kuwaiti companies and the perspectives of corporate leadership about the future needs. This analysis was based on a ranking of these 19 activities, based on the perceptions of the participants about the significance of each activity in the near future, disregarding the factual situation about their current conduct. The researchers noted that there existed a marked difference between the current practices and the perceived importance of different activities. The executives or managers of these companies envisioned that the activities in the areas of information organization, database development, data security, and the conduct of competitive intelligence were more significant for the future as compared to their present level of conduct. At the time of data collection for this study around late 2000, these respondents attached low importance to the perceived significance of Internet utilities and Web design. A number of factors were attributed to these perceptions.

(b) Organizational & Human Resource Aspects of IT & Information Management

As a follow-up of the earlier study, a year later, Rehman (2003a) examined IT functions in 31 Kuwait companies for analyzing organizational and human resource aspects of IT and information operations. The researcher used interview method for gathering data from the managers of IT or information divisions in order to analyse organizational and human resource aspects in five areas of information organization and indexing, resource development, searching, information packaging, and competitive intelligence. The study was based on the assumption that a better understanding of these aspects would make it clear how the Kuwaiti companies were employing their professional workforce, strategizing for the continuing development of their human resource, and employing organizational strategies for their effective utilization. It was expected that these findings would in turn lead to articulating market needs as a pre-requisite for designing appropriate education and training programmes.

Rehman and Marouf (2004) focused on organizational arrangements and employment policies and practices of these companies in five selected information management operations. The study investigated the organizational placement had been practiced in these companies and the profile of information professionals in terms of their education, professional background, and other significant affiliations. Issues related to employer perceptions about the preparedness of these professionals and the problems they faced in their employment were specifically addressed. It was found that information and indexing activities were primarily relegated to secretarial staff. Information resource development was fragmented across different divisions of companies. Novices were conducting searches without any specialized training. Employers faced problems in identifying where to get professionals who had expertise in information packaging and presentation. A large number of them used local Kuwaitis for collecting competitor intelligence, as they had the edge of cultural familiarity. Almost all the corporate companies did not have information centers or information specialists who could handle the crucial information management jobs. A number of IT and Human resource Development (HRD) managers complained that they could not find staff with appropriate sets of capabilities in the market.

Marouf and Rehman (2005) analysed the situation of human resources in terms of their education, professional background, and other significant affiliations. The

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study also addressed employer perceptions about the preparedness of these professionals and the problems they had faced in their employment. It was noted that their practices exhibited a great deal of diversity. It was found that the majority of the companies practised outsourcing for Web applications, system development, and database management. A clear majority of the employers showed dissatisfaction with the quality of local graduates and expected initiatives from the higher education institutions in the country. Further, Marouf and Rehman (2004) investigated policies and practices of these companies related to induction and orientation programmes; approaches for developing capabilities for change management; in-house training policies, resources, and facilities; and policies for sending employees for training. They reported that almost all the companies had intensive programmes for providing systematic induction to their new employees. Most of them had in-house resources and facilities for training. Many of them considered outside options for training and had developed policies for the purpose. These companies were not satisfied with the role of higher education institutions in providing useful training to their employees. Administration of training awards was biased in the favour of seniors, managers, and natives that defied the parameters of organizational needs.

(c) Information Management Activities in Kuwaiti Finance Companies

Rehman (2005) conducted a micro-analysis of IT and information management application in 17 banking, finance and investment companies in Kuwait. Data were gathered through open-ended interviews with IT and information managers. Rehman (2006b) presented profile and organizational characteristics of IT human resources related to their placement, reporting relationships, roles, human resources, and internal organization. Further, information was collected about employment of servers, operating environments and applications of IT systems and networks these companies were using. It was found that most companies had elaborate IT functions where IT managers played a significant role. Large companies had built in-house systems with little outsourcing while majority of the other companies used turnkey systems and a great deal of outsourcing. Much diversity was noted in system and network applications, related to the size and organizational needs of these companies. It was found that websites of most companies were static and these companies had to take firm initiatives if they had to adopt e-commerce or electronic transactions.

Rehman and Al-Ajmi (2007) analysed information management applications in these companies, focusing on database activities, Web and Intranet applications, e-commerce initiatives and management of enterprise knowledge. They found that most companies did not have interactive websites or Intranets and this has impeded their progress in e-commerce activities. Diverse database management applications were found where content deployment and database maintenance were mostly done at the departmental level. There was minimal use of search and retrieval activities from external databases. Further, these companies used a variety of systems and utilities for managing their recorded knowledge.

Salient Points

Findings of the three studies about the Kuwaiti corporate world have brought forth some vital understandings that indicate prevalent market needs and trends. These can be summarized as follows:

1. Kuwaiti companies have extensive IT and information applications. Their systems use state-of-the art hardware, software, and networking applications. Most of them are profoundly engaged in housekeeping, database, document management, communication, and networking activities.
2. Turnkey systems are used in most places. Large organizations have developed in-house systems. Outsourcing is commonly practiced for Web-based utilities and services, database management, and document management systems.
3. Use of external information resources and systems is not as widely practiced. Most companies have no subscription to external databases.
4. Most companies do not have elaborate facilities for management of organizational archives and records.
5. These companies lack policies and practices for organization of their internal information sources. An apparent weakness has been noted in indexing, archiving, warehousing, and retrieval systems.
6. Most companies do not have dynamic Web sites. Few have developed portals though many are having Intranet systems in place. Most companies are outsourcing these activities.
7. Most companies are not engaged in e-commerce initiatives as these do not have the needed systems and resources.
8. One area in which the employers wish to have qualified professionals is data and system security, encryption, firewalls, and other measures of transaction protection.

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9. Many companies are investing in continuing development of their IT and information professionals. However, lower level professionals do not benefit from outside training programmes.
10. Most companies prefer employing expatriate professionals. They express reservations about the competence of Kuwaiti professionals.
11. Almost none of these companies have an information center. Also, they do not have information specialists or information managers on their rolls.
12. These companies have no active liaison with Kuwait University for education and training of their professionals. They feel least involved about the academic and research activities in the higher education institutions. Their perceptions about the competencies of Kuwaiti graduates are low.

Human Resources Needs for the Emerging Corporate Market

The preceding section has identified areas in which the Kuwaiti corporate organizations are lagging behind. It has also pointed out general dissatisfaction of the corporate employers with the Kuwaiti graduates and their competencies. Concomitantly, developments in the areas of information and knowledge management make their own demands for introducing such academic programmes that would satisfy the existing needs and also cater for the emerging corporate context. This requires the Kuwait University and other higher educational institutions in the country to be proactive in articulating academic programmes that are compatible with these expressed needs and the future aspirations.

In order for the higher educational institutions to develop new programmes, they have to identify competency areas around which these programmes can be designed. Rehman (2003) had presented a model for preparing information studies curriculum based on competency definition and validation. The same model had been applied in the study of information study competencies from an international perspective (Rehman, Ansari, Yousef 2002). Rehman (2005) also proposed a set of information management and knowledge management modules that are relevant from the perspective of library and information science (LIS) professionals. These studies provide a relevant framework for possible application in the Kuwaiti context.

Need for Competency Modules

Based on the preceding discussions, the author is able to point out vital competency modules that need to be imparted in the coursework in the academic

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programmes of the higher education programmes. Congruent with these needs, we are focusing on the following selected areas in which concerted efforts need to be made:

1. Development of information/knowledge resources: developing information resources, creation and recreation of organizational knowledge; developing archives, document systems, records, repositories, organizational memories, collections of best practices, publishing systems and instruments.
2. Information/knowledge organization: indexing, warehousing, metadata, infomaps, knowledge maps, creating organizational systems, taxonomies and ontologies.
3. Content management: digitization, portal management, managing content systems in various media and formats, retrieval systems, information architecture.
4. Use and user behaviors: determining needs, marketing strategies and man-machine interfaces.
5. Information dissemination and knowledge sharing: policies and strategies, creating sharing context and environment, organizational communities of practice.
6. Social capital and social networking: creating human and social networks.
7. Systems, Tools and technologies: Technologies used for databases, document management, portal management, and content management.
8. Learning organization: developing dynamic and responsive organizations.
9. Management: corporate framework, leadership, motivation, human resource development and change management.
10. Data and system security.
11. E-commerce.
12. Competitive intelligence.

Existing Programmes

Kuwait University (KU) and Public Authority for Applied Education and Training (PAEET) are the two primary higher education institutions in the country that have produced graduates for the LIS market. Since PAEET has primarily been focused on vocational or pro-vocational studies, KU is the only institution responsible for producing professionals for IT and information needs of the Kuwaiti corporate sector. A number of private universities have been established during the last few years, but these institutions are just about to produce early batches of their graduates.

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The author has noted that Kuwaiti corporate employers are largely dissatisfied with the graduates of KU for their employability and adjustability to their needs. They are also skeptical about the absence of satisfactory initiatives of collaborative or funded research, student internship, or other avenues of mutual interaction and engagement. Rehman (2000) had analysed the IT and information education programmes at KU to examine the stakeholders' response to the expanding domain of information studies in. He observed that the coverage of these topics in the curriculum was inadequate. However, the treatment was primarily from the parochial viewpoints of the respective departments. The socio-human fabric underlying many of the perspectives was not evident in the coverage of information study topics.

It is plausible that many of the competency modules needed by the Kuwait corporate employers, as documented in the preceding section, might be given some treatment in the existing programmes. However, there is an apparent need to examine the coverage and treatment of the areas highlighted earlier systematically in the coursework of the higher educational institutions of the country. That might present a clearer picture of the competency elements that are missing in the coursework or their treatment is scant or inadequate in Kuwaiti higher educational institutions.

Strategies for Development

There exists a strong need to develop information and knowledge management programmes in Kuwaiti higher educational institutions that might cater for the specialized needs of the corporate sector. Initiatives need to be made at both the undergraduate and graduate levels. Rehman, Abdul Karim and Chaudhry (1998) had established that the academic programmes for information studies need to be designed in a manner that these are mutually complementary. They also listed competencies for which undergraduate programmes appeared to be more appropriate. Kuwaiti market needs to employ a large number of undergraduates who can serve in entry-level professional positions or vocational or technical tasks. For this purpose, these academic programmes need to be carefully and thoughtfully designed. Rehman and Marouf (2003b), based on their review of the North American model of information studies at the undergraduate level, proposed specific guidelines for developing undergraduate programmes. Graduate programmes, on the other hand, need to satisfy the needs of professionals who

have to be employed for professional and managerial positions. They concluded that diverse approaches were needed for developing these programmes. However, they noted the need for a uniform treatment of the core courses around which the undergraduate programmes could be designed for information studies.

Another vital strategic consideration is that information and knowledge management education is multidisciplinary in nature. Information systems, human resource department, IT and computing departments, organizational behavior, information science, and a number of other disciplines contribute to the development of these programmes. Chaudhry and Higgins (2003) analysed the knowledge management curricula and concluded that a multidisciplinary approach was the primary requirement of the discipline. Rehman and Chaudhry (2005) who studied 12 knowledge management (KM) education programmes about the nature of their coursework, KM positions the graduates might target, interdisciplinary partnerships, strategic partnerships with industry, and practical difficulties in the introduction of KM courses. There existed a strong interest in offering KM courses, cultivating collaboration with business and computing schools, and developing strategic partnership with industry. KM educators faced difficulties in recruiting specialist faculty members, cultivating interdisciplinary collaboration, initiating partnerships with industry, and enrollment of students. Rehman and Chaudhry (2004) also analysed the core competencies for KM education. These were as follows: content management, IT, leadership, management, communication, and information. A detailed breakdown of these competency areas was reported in their findings. Loon and Al-Hawamdeh (2002) discussed curricular aspects of the development of KM programmes. Rehman (2006a) had a focused treatment of these competencies from the perspective of information professionals.

These discussions point to the peculiarities of information and knowledge management education. The schools need to develop faculty and other resources in order to offer these initiatives. On campus, conscious and concerted efforts need to be made for inter-disciplinary understanding and collaboration. At the community level, partnerships have to be developed with the stakeholders in the corporate context and other professional agencies. A multi-pronged strategic approach is needed if KU or other higher educational institutions in the country plan to produce graduates who could be befittingly employed in the corporate market in information and knowledge domains.

CONCLUSION

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This paper has established how systematic assessment of market needs might lead to the design of LIS programmes. It is always through these rigorous investigations that the market needs can be articulated in a manner that these could be translated into sets of needed competencies and academic curricula. It has been witnessed that changes in LIS programs and curricula in the developed world has been pervasive. These have addressed diverse needs of the emerging market. As a result, new roles and career possibilities have been proposed for LIS professionals. Conversely, progress in developing nations has been weak and fragmented.

This paper addresses a number of critical questions that need to be explored before introducing changes in academic programmes and curricula. It is expected that these findings will help in the redesign of Kuwait University's LIS programme. Other five nations in the region, namely Saudi Arabia, United Arab Emirates, Bahrain, Qatar and Oman are members of the Gulf Cooperation Council (GCC), have similar socio-economic, cultural, linguistic and technological situation. These findings might have a great potential for their consideration for the development of LIS professionals in these countries.

References

- Buttlar, L. and DuMont, R. 1996. Library and information science competencies revisited. *Journal of Education for Library and Information Science*, 37 no. 1: 44-62.
- Chaudhry, A.S. & Higgins, S. 2003. On the need of a multidisciplinary approach to education for knowledge management. *Library Review*, 52, no.2: 65-69.
- Gordon, T. J. 2002. And who asked your opinion? *Information World Review*, No. 178: 14.
- Loon & Al-Hawamdeh. 2002. Knowledge management education and curriculum development. *Journal of Information and Knowledge Management*, 1, no. 2: 99-118.
- Marouf, L. & Rehman, S. 2002. Emerging digital environment in the private sector: an analysis of information operations. *INSPE*: 36: 95-113.
- Marouf L.& Rehman, S. 2004. Human resource development policies and practices for the IT workforce in Kuwaiti companies. *Library Review*, 53, no. 7: 351-355.
- Marouf, L. & Rehman, S. 2005. Organizational and human resource aspects of IT management: A case of Kuwaiti corporate companies. *Electronic Library*, 23, no. 4: 383-397.

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- Middleton, M. 2003. Skills expectations of library graduates. *New Library World*, 104: 42-56.
- Rehman, S. 2000. The Kuwaiti response to the expanding domain of information studies: an analysis, *Education for Information*, 18, no. 1: 53-66.
- Rehman, S. 2001. *Information Education in the Arabian Gulf for the 21st Century*. Unpublished research report submitted to the Kuwait University Research Administration, 207 p.
- Rehman, S. 2003a. *Human resources for information sector in the Kuwaiti corporate Organizations*. Unpublished report submitted to the Kuwait University Research Administration, 83 p.
- Rehman, S. 2003b. Information studies curriculum based on competency definition. *Journal of Education for Library and Information Science* 44 no3/4: 276-95.
- Rehman, S. 2005a. A study of the selected information applications in the IT departments of Kuwaiti corporate companies. Unpublished research report submitted to the Kuwait University Research Administration, 64 p.
- Rehman, S. 2006a. New age competencies for information professionals. Plenary session paper, A-LIEP Conference, Singapore, April 3-6, 2006.
- Rehman, S. 2006b. IT applications in Kuwaiti financial companies: an analysis, *Information Management and Computer Security*. Accepted and scheduled for publication in issue 6 of volume 14.
- Rehman, S., Abdul Karim, N.S., & Chaudhry, A.S. 1998. Differentiated competencies for graduate and undergraduate levels: Needed transformation of the information study programmes. *Education for Information* 16: 9-28.
- Rehman, S. & Al-Ajmi, B. 2007. An analysis of the selected information management applications in Kuwaiti financial Companies. Paper accepted for publication in the *Singapore Journal of Library and Information Management*, issue December 2007.
- Rehman, S., Al-Ansari, H. & Yousef, N. 2002. Coverage of competencies in the curriculum of information studies: an international perspective. *Education for Information*, 20 no. ¾, 199-215.
- Rehman, S., Baker, A. and Majid, S. 1998. Needed capabilities and development strategies for future information professionals: perspective of a developing country, *International Information and Library Review*, 30: 1-19.
- Rehman, S., Baker, A. and Majid, S. 1998. Defining competencies for special library professionals in Malaysia. *Aslib Proceedings* 49 no. 6: 162-69.

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- Rehman, S. & Chaudhry, A.S. 2004. Development of KM competencies in LIS programmes , *Singapore Journal of Library & Information Management*, 33: 1-14.
- Rehman, S. & Chaudhry, A.S. 2005. KM education in LIS programmes , *Education for Information*, 23, no. 4: 243-258.
- Rehman, S., Majid, S., and Baker, A. 1998. Competency definition and validation for library and information professionals in Malaysia, *Journal of Education for Library and Information Science* 392, 100-117.
- Rehman, S., Majid, S., and Baker, A. 1998. Competencies for public library professionals in Malaysia. *Public Library Quarterly*, 172, 63-80.
- Rehman, S., Majid, S., and Baker, A. (1997). Competencies of future library professionals of academic libraries in Malaysia. *Library Review* 46 no 6: 381-393.
- Rehman, S. & Marouf L. 2003a. Information operations in corporate sector: an analysis of the Kuwaiti situation. *Program*, 37, no. 1: 31-37.
- Rehman, S. & Marouf L. (2003b). Developing Undergraduate Programmes for the Information Market of the Corporate Sector. *Singapore Journal of Library and Information Management*, 32: 34-48.
- Rehman, S. & Marouf L. (2004). Human resources for information management operations in Kuwaiti corporate companies. *Information Management and Computer Security*, 12 no. 2: 191-201.
- Taylor, V. 1998. Competencies survey: focus on special libraries. *Information Outlook*. 2 no. 11: 42-43.
- Stenson, A., Raddon, R. and Abell, A. 1999). Skills and competencies in the corporate sector. London: British Library Research and Innovation.