



Study and Analysis of KM Practitioners' Training Preferences: A Malaysian Case

Siti Arpah Noordin and Haryani Haron

Universiti Teknologi MARA, Shah Alam, Malaysia

Abstract

As knowledge management (KM) is considered a multifaceted discipline in Malaysia, KM is still evolving. In fact, the transformation in the Malaysian government's agenda on the Knowledge-economy has been reflected in the development of the Knowledge-based Economy Master Plan in the year 2001. From the social constructionist philosophical stance, this interpretive study uses the qualitative research approach to explore and investigate the KM practitioners' training preferences. Employing the case study approach, the researcher used face-to-face semi-structured interviews to understand the phenomenon based on the experience of KM managers of organization XYZ. The findings reveal that as they progress over the years as KM personnel, beside learning through day-to-day experiences, they acknowledge that they still lack some essential KM competencies. The findings highlight six essential KM competencies that are required by any KM personnel which include KM overview, KM tools, CoPs, Knowledge Taxonomy, Information Management and KM Measurement. Without clearly clarifying the level of each competency, they however highlight the issues of its importance, complexity, benefits and implementation and application issues related to the competencies. The findings also highlight the relevance of KM-related training initiatives, which is vital to equip KM managers/officers with appropriate KM 'technical' skills. As KM managers' suggestions and views on KM competencies derive from their involvements in KM initiatives, the KM managers admitted that the required competencies and their involvements have influenced their preferences towards KM-related training. Indeed, most of the KM managers prefer some advanced KM-related courses as well as a certified KM training.

Keywords: knowledge management training, certified training, training needs, KM managers, KM competencies.

Introduction

As knowledge management (KM) is considered a multifaceted discipline in Malaysia, KM is still evolving. In fact the transformation in the Malaysian government's agenda on the Knowledge-economy has been reflected in the development of the Knowledge-based Economy Master Plan in the year 2001. In Malaysia, some big companies have already started their KM journey; indeed the Knowledge-based Economy Master Plan has stimulated government agencies, public services as well as local companies to adopt KM (Chowdhury, 2006). While

knowledge comprises both explicit and tacit forms, many organizations have created knowledge management teams with various KM designations /positions, led by Chief Knowledge Officers (CKOs) to manage the knowledge activities within the organization. Regardless of which approach an organization embarks on, there must be a 'shared understanding' of the organization's KM direction, so knowledge assets could be capitalized at every level in the organization. Therefore, it is crucial for KM team members to being able to introduce and promote the organization's KM direction; consequently, those who are responsible for managing

the initiatives should have adequate skills and knowledge to perform their KM tasks. As part of the organizational learning initiative, training may build employees' skills and knowledge levels so as to support organization's competency development and productivity. Roberts (2006) affirms that training is needed to equip employees to perform their tasks so that the desired performance can be achieved. For that reason, successful companies strongly emphasize training and development.

Literature Review

Technical Competencies

The lack of a precise and commonly accepted definition of the terms competences, competency and competencies in the literature is regarded as problematic and reflects conceptual ambiguity (Garavan, 1997; Hoffmann, 1999; Iles, 2001; Robinson *et al.*, 2007). Although there are a number of sources that have studied this area, there is little agreement or consensus on the precise definition of the word competency (Hoffmann, 1999; Schippmann *et al.*, 2000). Murray (2003) described competencies in terms of two broad definitions:

- **Personal (or Managerial) Competencies** - comprised of personal attributes, skills and behaviours to perform a function or task of a job.
- **Organizational Competencies** - defined by processes, systems and practices that enable the organization to turn personal competencies into organization-wide competencies.

On the other hand, UNIDO (2002, p.8) defines competencies as '... a set of skills, related knowledge and attributes that allow an individual to perform a task or an activity within a specific function or job'. UNIDO (2002, p.10) classifies competencies into three categories:

- **Managerial Competencies** - competencies that are considered essential for all staff with managerial or supervisory position, i.e. analysis and decision-making, team leadership and change management.
- **Generic Competencies** - competencies, which are considered essential to all staff, regardless of their function or level, i.e. communication, word processing.
- **Technical/Functional Competencies** - specific competencies essential to perform any job in the organization within a defined technical or functional area of work.

According to Bratton (2004, p.4), technical or functional competencies are '... the attributes that differentiate one job from another - the things that make a customer service representative different from a systems analyst or HR manager.' Boam and Sparrow (1992, p.19) describe technical competencies as 'skills and abilities apply particularly to those jobs with a professional component'. For example, the job of a solicitor demands a specific set of technical skills and knowledge, such as knowing the law of tort and how to draw up a will (Boam and Sparrow, 1992). While, in a knowledge management context, technical competencies would be skills and knowledge within the specific KM subject matters.

Knowledge Management Competency

Most research on competencies concentrates on the area related to the *managerial* and *generic* competencies rather than on the *technical* competencies. In fact, there has been much research related to KM highlighted the KM technical competencies indirectly, while discussing other KM-related issues, such as knowledge taxonomy (Milne, 2007), KM education (Chaudhry and Higgins, 2003) and knowledge measurement (Cheung *et al.*, 2007; Rodov and Leliaert, 2002).

Several discussions on KM roles and technical competencies are of great length and can be found in the work of Al-Hawamdeh (2003), Davenport and Prusak (2000) and Abell and Ward (2000). Abell and Ward (2000) report findings of research funded by the UK Library & Information Commission on KM practitioners' roles. Their study identified that KM practitioners may perform the role of a knowledge leader, knowledge

manager, knowledge navigator, knowledge synthesizer, knowledge broker, content editor or even web master. Conversely, Davenport and Prusak (2000) explore four levels of KM personnel; namely, knowledge-oriented personnel, KM workers, knowledge project managers and chief knowledge officer. Exhibit 1 is constructed based on Davenport and Prusak's (2000) discussion on the KM roles and their descriptions.

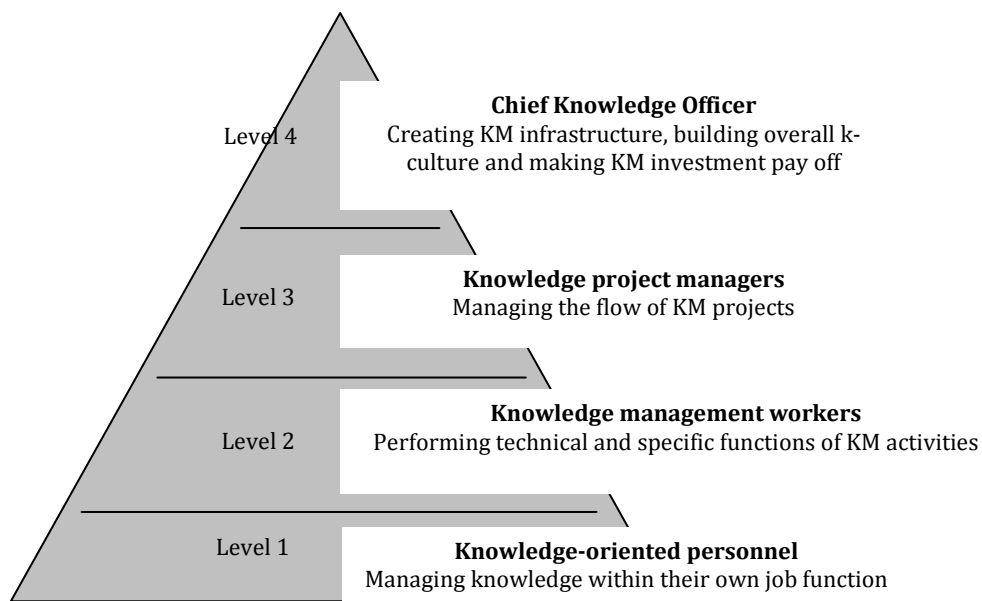


Exhibit 1 Knowledge Management Personnel & Roles

According to Pemberton, Stonehouse and Francis (2002) to become a knowledge-driven organization, one of the potential barriers to achieve KM objectives is when there is no 'knowledge champions' who are supposed to facilitate KM. In fact, in the study on 31 KM projects, Davenport and Prusak (2000) reveal that one of the KM pitfalls is when an organization does not have personnel (knowledge champions) whose primary job is to extract and edit knowledge from others who have it, facilitate knowledge networks and set up and manage knowledge technology and infrastructure. Conversely, Jones, Herschel and Moesel (2003) describe knowledge champions as change agents who facilitate knowledge acquisitions from knowledge innovators and at the same time facilitate knowledge sharing and the effective use of

organizational memory by codifying and institutionalizing new knowledge. Davenport and Prusak (2000) conclude the role in managing KM projects will demand an unusual mix of psychological, technological and business skills.

Those who are initially involved in KM activities are mainly the information technology (IT) or information management (IM) professionals. However, since many are aware that KM is not just about systems, KM concerns other specialists as well, including those of business management and human resources. Information professionals who are trained in managing explicit knowledge could utilize their skills in various aspects of KM activities. Koenig (1997) claims that authors in the business community are just

in the discovery process of venturing KM while information professionals/librarians have been in KM business for years. Researchers and practitioners in computer and information science have well-defined skills and expertise in information management that will make a huge contribution to KM theory and practice (Brogan, Hingston and Wilson, 2001). Some KM managers' skills, which were highlighted in KM literature, are summarized in Table 1.

Bouthilier and Shearer (2002) highlight that skill held by information professionals, such as knowledge identification and acquisition can benefit KM practices as

they facilitate a comprehensive KM initiative. However, according to Al-Hawamdeh (2003), although having information management skills is vital for KM practices, they are not sufficient. This is because information professionals are well trained in managing the explicit part of knowledge. Activities such as cataloguing, classifying, indexing, abstracting and other related information 'storage and retrieval' activities are associated with Information Management. In general, creating a knowledge environment requires an understanding of huge complexity of knowledge and information resources and the dynamic interactions of people as well as information.

Table 1

Able to...	KM Literature
1. frame and structure valuable knowledge (k-mapping)	Al-Hawamdeh, 2003; Clarke & Rollo, 2001; Davenport & Prusak, 2000; Housel & Bell, 2001; Singh, 2007
2. enhance the transformation of data to information and then knowledge (difference between IM and KM)	Al-Hawamdeh, 2003; Chaudhry & Higgins, 2003; Clarke & Rollo, 2001; Davenport & Prusak, 2000; Friedman <i>et al.</i> , 1997; McElroy, 2003; Plessis, 2007; Singh, 2007
3. recognize the potential of technology	Al-Hawamdeh, 2003; Coakes, 2005; Housel & Bell, 2001; Ow, 2001; Singh, 2007
4. work within the organizational KM structure and team, facilitate and enable CoPs	Al-Hawamdeh, 2003; Coakes, 2005; Davenport & Prusak, 2000; Ow, 2001; Pemberton <i>et al.</i> , 2007; Pemberton <i>et al.</i> , 2002; Plessis, 2007
5. facilitate knowledge acquisition, sharing and application	Al-Hawamdeh, 2003; Allee, 1997; Bouthilier & Shearer, 2002; Clarke & Rollo, 2001; Jones <i>et al.</i> , 2003; Ow, 2001
6. facilitate the k-measurement and policy issues	Cheung <i>et al.</i> , 2007; Davenport & Prusak, 2000; Ow, 2001; Rodov & Leliaert, 2002
7. understand the primary business processes	Chaudhry & Higgins, 2003; Davenport & Prusak, 2000; Jones <i>et al.</i> , 2003
8. develop taxonomy	Chaudhry & Tan, 2005; Gilchrist, 2001; Milne, 2007

KM-Related Training

It is important for organizations to make sure that employees are given appropriate training. The significant element emphasized in defining training is that it involves learning activities that focus on job-related knowledge and skills. In a broader sense, training can be defined as

any effort to improve managers' or employees' job-related knowledge and skills (Kitching and Blackburn, 2002). Martin *et al.* (2007, p.578) refer to training as 'the transfer of information in a formal setting for the purpose of increasing human capital'. Training is 'a planned activity conducted over the short term to impart specific job-related knowledge, skills and

attitudes' (KSA) (Corbridge and Pilbeam, 1998, p.222). Training involves any learning activity whose intention is to allow the acquisition of specific knowledge and skills related to certain jobs or tasks (Cole, 1997). However, what is most important to be aware of is that there is no 'one-size fits-all' concept in addressing skills gaps (Longenecker and Fink, 2005). The authors elaborate that in terms of training, different level of managers will have different views and needs which must be recognized and addressed.

Much of KM literature mention training within the context of developing organizational or employees' competencies and creating KM awareness among employees in knowledge-based organizations, such as in Gorelick and Tantawy-Monson (2005), Hung *et al.* (2005), Nargund and Thomas (2007) and Psarras (2006). There is also KM literature that focuses on KM training and education in the area of curriculum design such as in Al-Hawamdeh (2005), Al-Hawamdeh (2001), Chaudhry and Higgins (2003) and Mark, Philip and Vicky (2001). KM training and awareness courses are essential in order for staff to understand the KM development philosophy that the organization has adopted and are considered to be one of the key success factors for KM implementation (Jennex and Zakharova, 2005; KPMG, 2000). Suggestions that KM training programs are essential for employees to become totally and intensely familiar with the organizational KM concepts are also highlighted in Akhavan, Jafari and Fathian (2006) and can be found in much of KM literature. Nevertheless, this type of training is more about KM familiarization activities for employees or knowledge workers as the organization moves towards becoming a knowledge-driven organization. Newman (2002) argues that KM is a broad spectrum and identifying appropriate KM education or training is not a straightforward process as some employees might need specialized training in specific methods or practices or a fundamental understanding of principles of KM in general. Based on that reason, it is important for individuals or organizations

to understand which training is appropriate in improving their KM skills and would help them to perform their KM tasks.

Methodology

Since the focus of this study is to gain insight into KM managers' interpretations and attitudes towards KM training, this research tries to go in-depth within the context of KM practitioners' social interactions and experience of KM managers who are involved in KM initiatives. Since social science research is about the study of human beings, instead of 'objects' as in natural science, the interpretive paradigm with the qualitative research approach is adopted to achieve the research objectives. KM managers' interpretations of KM competencies were interpreted as a process of sense-making in the KM social setting. Benton and Craib (2001) state that, in social science, since human beings are not the same as 'objects' of chemistry and physics, the study involves a more complex setting. A qualitative approach has been chosen as the strategy has the potential to produce data from KM managers' natural setting. In this context, as it involves 'people' – the KM managers interpret their KM experience and attach meaning to what is going throughout their involvement in KM initiatives. Following this context, this study is exploring and assessing the managers' KM experiences in relation to KM competencies and the implication on their attitudes towards KM-related training.

As this research aims to uncover the phenomena of knowledge management and how KM practitioners interpret the essential KM competencies needed in managing KM initiatives. By adopting a qualitative case study approach, this research intends to provide in-depth interpretations of the real-life context about the preferred KM related trainings. Case study is known as a type of 'field research' and therefore, the unit of analysis or sample of this research is the KM managers in organization XYZ. To address the research questions, the qualitative data

were collected from a series of semi-structured interviews. In this research, the purposive sampling was employed in the selection of thirteen KM managers believed to be the informants who could provide and generate pertinent data based on their involvement in KM initiatives at XYZ. A formal letter of invitation to each potential participant was sent through email. The data generated from the face-to-face conversations were tape-recorded using the digital dictation machine. The interview sessions, which were open-ended, emphasized the purpose and anonymity aspect, was mainly conducted in English. A consent-form was prepared and given to the respondents before the interview session. The respondents were encouraged to speak freely and the interview lasted around one hour.

Findings and Discussion

Education and training programs attended by KM managers include both those conducted in-house and those by external providers such as workshops, seminars, certification KM training as well as those offered in terms of a master's degree in Malaysian universities and abroad. From the training, they believed that they became more confident and more knowledgeable as KM managers. The discussion and evaluation in this section reports the training implications from KM practitioners' perspectives.

Essential KM Competencies

Essentially all of the respondents believe that having relevant competencies within KM subject matters is crucial for several fundamental reasons, such as: promoting and supporting KM in the organization, being easier to sell KM ideas and helping to strategize KM when equipped with adequate knowledge. Since KM managers are responsible for introducing, promoting and facilitating the concepts, principles, tools and activities, promoting KM ideas will be easier when they have the ability to relate KM concepts to their business operations. KM initiatives require a certain amount of investment; therefore the outcomes need to be justified. Since KM

managers are responsible for managing organizational knowledge assets, they have to rationalize and elaborate to management and employees how KM contributes to better organizational performance. The findings reveal six KM competencies that KM managers interpret as essential while performing their KM tasks. Two main issues are addressed for each competency; KM managers' views on the essential KM knowledge and skills needed (*what*) and the justification for the importance of the knowledge and skills in performing their KM tasks (*why*). The highlighted six essential KM competencies are: KM Overview, Corporate Taxonomy, KM Tools, Communities of Practice, Knowledge Management & Information Management.

It has been noted by Al-Hawamdeh (2003) that for those who are involved and interested in KM, one of the general characteristics is having a good knowledge of the KM subject matter. It is important for KM managers understand the characteristic of corporate taxonomy. The rationale can be found in Harvey (2003), who says knowledge taxonomy is a course of classifying organization's knowledge assets which describes and classifies the structure for knowledge storage and retrieval that will help future searching and browsing of organizational information and knowledge. Therefore, the fact that taxonomy is a set of controlled vocabularies, lacking user orientation was one of the significant issues (Bearman and Trant, 1998; Chaudhry and Tan, 2005; Geser, 2004; Nicholson, Dunsire and Neil, 2002). On the other hand, as they are responsible for introducing and promoting KM tools to the organization, KM managers should be able to relate the benefits of each tool introduced to support KM activities. The decision to choose certain tools will depend on how they could support knowledge activities like knowledge sharing, transfer, capturing, acquisition or even knowledge retention. In fact, the use of certain KM tools in one department or organization could be different to another organization depending on their department or organizational culture (Robertson, 2005).

KM managers believe that an in-depth understanding of CoPs is crucial, as they maintain that CoPs is capable of generating a more effective way of supporting KM activities. Pastoors (2007) highlights that because of the importance of CoPs that allows a platform for learning between individuals; it would be useful to understand the concept of CoP. As the person who is responsible for coordinating and facilitating the work of CoPs. KM officers will carry out both the management and leadership activities of CoPs (Garavan *et al.*, 2007). The findings reveal that measuring knowledge and benchmarking knowledge activities are two main challenges that KM managers had to face in managing knowledge. The respondents revealed that these were caused by various issues including lack of literature and the challenge of identifying suitable knowledge indicators as well as that of identifying other organizations for benchmark purposes. Understanding how to assess intangible knowledge assets or knowledge-based assets (KBA) could provide KM managers with a strategic weapon useful when interacting with stakeholders (Edvinson, 2000; Steward, 1997; Sveiby, 1997). Within a broader context, when XYZ could not identify suitable proxies for measuring their knowledge assets or activities, benchmarking what they are doing with other organizations that practise KM was found to be difficult. In fact, although a Malaysian Benchmarking Service was set up under the National Productivity Corporation (NPC) in 1997 to provide services and information on best practices through partnership and networking (Yean, Zailani and Keng, 2006), benchmarking was not widely adopted by Malaysian organizations.

In relation to the information Management (IM) related competency, although KM officers of XYZ came from different backgrounds, they suggested that having the knowledge in information management (IM) would be a plus and even some considered information management the basic skill that KM officers should have. According to Gourlay (2000), regardless of the ambiguity of KM and its frail theoretical

stand, KM that is practised in many organisations tends to overlap with information management. Much of the literature tends to suggest that a human element is an essential component of KM (Bouthilier and Shearer, 2002; Davenport and Prusak, 1998; Gourlay, 2000), nevertheless the preservation and retrieval of information should be in place to maintain the success of IM as a whole and these ultimately support the success of KM project (Martensson, 2000). Most respondents agreed that KM will not be successful unless the KM activities are complemented by IM activities at any stage of the KM cycle. For example, capturing tacit knowledge will need proper repository systems. Knowledge taxonomy will involve the skill of knowledge classification. Identifying strategic knowledge will need a solid information searching strategy and knowledge sharing might be supported by information dissemination activities.

Attitudes towards KM Training

Most respondents revealed that they enhanced their KM knowledge and skills as they progress along their KM journey from various sources, such as KM literature, books and articles and practitioners' blogs as well as training. The respondents believed that, from the training that they attended, they could gain knowledge of new KM ideas, practices or experiences from the speakers as well as other participants. This is because through training courses, employees' value will increase, and as they become more valuable, the value of the organization also increases (Martin, Wech, Sandefur *et al.*, 2007). Most respondents admitted that the insufficient knowledge in KM (knowledge gaps) was a problem while performing their KM activities. Perhaps problems had become one of the driving forces that make people interested in training, which is part of learning process as highlighted in Hwang (2003). In this case, some respondents revealed that the problem of insufficient KM knowledge will always be there, since KM is still very much an open subject. To address the problems, the respondents sought KM-related training (short term KM

training or further education KM programs) to enhance their KM knowledge acquisition. Exhibit 2 elaborates respondents' attitudes toward KM training outcomes in general. By attending the KM

training, respondents would be exposed to new KM ideas, practices and experiences, which will improve their KM understanding.

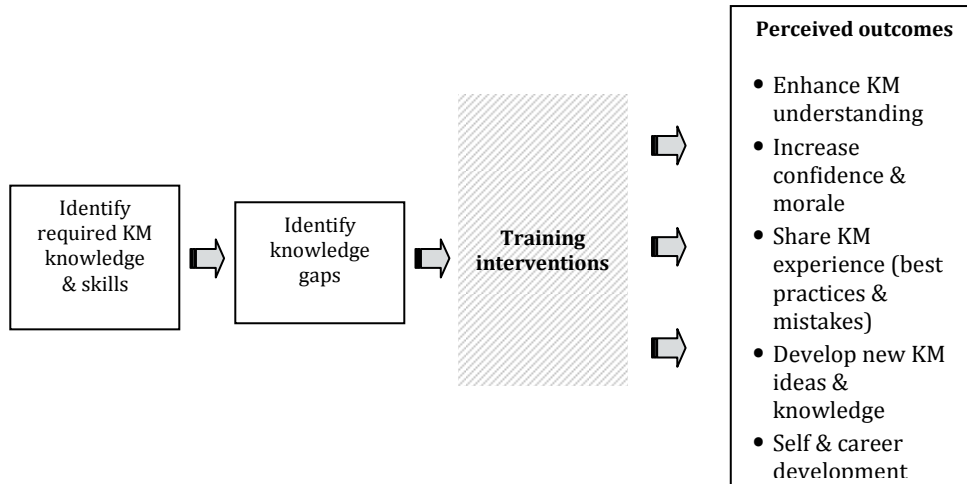


Exhibit 2: KM Training Outcomes

Akhavan, Jafari and Fathian (2006) reveal that to extend KM policies and to reach knowledge totality in an organization that adopts KM, employees should be entirely and intensely familiar with KM concepts and this could be achieved through continuous training programs. Since KM had been established in 1999, the respondents expressed that they prefer to attend a much more advanced KM training. A recent study by Plessis (2007) suggests that in-depth KM training could provide a clear understanding of how KM initiatives work and allow successful participation in the KM activities. For example, advanced KM topics required by KM managers such as the IT-driven KM tools or taxonomy development will further improve their understanding although they had experienced such activities.

the respondents, KM managers at XYZ were encouraged to attend training opportunities such as seminars, workshops and short courses offered by both internal (in-house) and external training providers not just organized in Malaysia but also abroad. They revealed that the main advantage of attending training programs organized by external training providers is that they could develop or create a new CoP every time they attend big seminars like KM Europe or KM Asia. In fact, CoPs could become another platform for learning as it allows sharing of experiences and knowledge among other participants. However, most respondents prefer in-house KM training since its content is normally designed or constructed within the context of their organization. This is because XYZ's Knowledge Management Centre adequately provides KM training courses customized according to their KM activities and objectives.

KM could be considered a new working culture in many organizations. Therefore, in the forthcoming years we could witness the emergence of a variety of KM-related training from all types of training provider. KM managers at XYZ were given opportunities to attend KM training programs offered by both the internal and external training providers. According to

Since KM is now considered an 'evolving' organizational culture, it is important for employees to equip themselves with a KM scope whose context is relevant to their organisations' KM direction. Therefore, the respondents believed that in-house

training is relevant since it understands the organizational problems. Most respondents believed that they gain benefits from attending KM training even if it is sometimes repetitive and serves only as a refresher. They believed that as one of the self-development plans, training had made KM officers more confident in their knowledge and competency which helped them perform their knowledge activities as they could see the prospect of KM as a niche area that has the potential to develop. The outcomes from attending training are potentially benefiting the employees. These support Bushardt, Fretwell and Cumbest (1994) who revealed training could improve employee satisfaction, enhance employees' skills, build up employees' senses of belonging and benefit as well as develop employees' commitments to the organization. In fact, Read and Kleiner (1996) state that after attending training programs, employees should be able to carry out what they were trained for. Employees experience in a quality job-related training program may lead to improve morale and enhance a sense of achievement and accomplishment which will eventually increase organization competitiveness (Elizur, 1996).

Preferred KM Courses

The findings show that XYZ was committed to encouraging and supporting their KM officers in KM-related training programs so as to make them more competent in delivering their KM tasks. Perhaps most employers acknowledge that the investment they put in training is crucial to improving organizational performance.

Organizations, that are not willing to spend on training for staff, will affect the organization's performance (Longenecker and Fink, 2005). According to most respondents, at XYZ the employees are given the opportunity to identify which KM training that they felt relevant to them. This is common in most organizations today which holds up to Corbridge and Pilbeam (1998) who claims that beside relying on the employer to identify employee training programs, individuals or staff in an organization should also take

responsibility for their own learning and development. In fact, this is part of the approach used in competency-based training. Newman (2002) suggests that not just education or training providers need to work together with KM practitioners, but KM practitioners should also be actively participating in the development or delivery of their own education and training needs. Attempts could be made by continuously doing self-assessment of their 'gaps'. This may help individuals to decide appropriate learning opportunities that would bridge the gaps (Longenecker and Fink, 2005).

Though training could contribute to enhancing respondents' KM competencies, the findings reveal that there are respondents who were quite selective in their choice of KM training based on several reasons. They reveal that one of the reasons for that is because certain KM trainings are too general and theoretical. The courses that the respondents attended generally are provided on-the-surface discussion on KM especially in big conferences rather than on training that is relevant to the practical side of KM implementation as some respondents prefer. According to the respondents, training that emphasizes on how KM implementers perform certain knowledge activities are difficult to find. According to Pratt (1980), very often the process of design and development of most training programs is carried out by training providers or trainers and therefore, the needs of the trainees are almost ignored.

Some respondents on the other hand preferred KM-related training that is more advanced and complex in its content. For example, analyzing and customizing KM tools, measuring knowledge asset or advanced topics on CoPs were all cited. XYZ embarked on their KBO journey in 1999, yet the respondents agreed their KM-related knowledge was insufficient. They preferred the more advanced KM topics (i.e. new KM development, implementations and applications) rather than the basic KM knowledge since the respondents got adequate basic KM training from outside XYZ as well as that

conducted in-house. It is difficult to find something, which specifically suits the respondents' training needs especially when there are differences in perspective about KM which according to Chaudhry and Higgins (2003) seems to influence the development of KM curriculum or program design. While on the other hand, since 'knowing' comes from 'doing', Pfeffer and Sutton (1999) note that KM officers develop their KM-related skills as they move on over the years performing their tasks; they reached a level where they would like to have KM training that provides some advanced or complex KM approaches and implementation. For that purpose, XYZ has called in consultants to provide some in-depth training on specific KM topics such as developing taxonomies, exploiting KM tools or constructing a knowledge measurement exercise.

In terms of training providers, the findings also reveal that some KM training offered by external providers failed to reach their expectations. What they expect from the training or the content highlighted by the organizing body before the actual training was not up to the respondents' satisfaction in practice. Therefore, it is important for both training providers (external or in-house) to understand when a training program fits the organization. It is crucial for the organization to identify clear objectives of training intervention while designing the program (Corbridge and Pilbeam, 1998). The authors suggest that this could bridge the gap between the present and the desired state of the learners. To make sure that the organization is providing the desired training course, they should conduct training needs analysis (TNA) before designing any training programs. It is a systematic approach that usually defines employees' needs for training (Cole, 1997) by comparing the demand of the jobs and organizational change with the level of knowledge and understanding.

From the results, among those topics of KM-related training that most respondents would prefer to attend in the future are some advanced courses which include training on KM implementation and

application, KM tools especially storytelling corporate taxonomies, content management, knowledge repackaging, KM best practices and knowledge measurement. However, although there are many training providers with all kinds of KM training, to have one that relates to the practical approach is difficult. This is because according to Newman (2002), although training providers offer a variety of KM training to individuals, companies and organizations, they do not seem to be relevant to the 'real-world' situations.

On the other hand, some respondents showed that they are not selective at all concerning the type of KM-related training they would like to attend. Those with this type of attitude are mainly the part-time KM agents. Justifying their arguments, they said that by attending any type of KM-related training regardless of the level of the topic, there must be something that could be learnt throughout the sessions or at least it would help them make new networks or community of practice. One respondent admitted that any KM training would provide the respondent with opportunities that they could not resist because the respondent knew that something new will be explored. In this aspect one could not deny that the advantage of creating a new network of KM practitioners is valuable. However, it should also be weighed against the amount of cost invested in the training since some are really very expensive. In fact, with the availability of the Internet, virtual KM CoPs are available everywhere through practitioners' blogs or KM user groups.

Exhibit 3 summarizes KM managers preferred training, which they believe could enhance their skills in performing KM activities. It illustrates KM activities and preferred KM courses such as: *KM tools*, *Corporate Taxonomy*, *Content Management*, *KM best practices*, *K-measurement* and *Knowledge Repackaging*. Some specific courses highlighted by the respondents may directly help to develop and enhance the required KM competencies, such as *K-measurement*, *corporate taxonomy* and *KM tools*. In fact, since the characteristics of KM are multidisciplinary and interdisciplinary

(Singh, 2007), the content of some specific areas could overlap with one another. For example, courses related to KM tools may enhance KM managers' knowledge on various types of tools to be adopted, including CoPs, which can be considered as powerful KM tools that support knowledge sharing and transfer. On the other hand,

courses related to building *taxonomy*, *content management* and *knowledge repackaging* could enhance participants' competencies related to information management as stated in Milne (2007) that these are fundamental activities of information management.

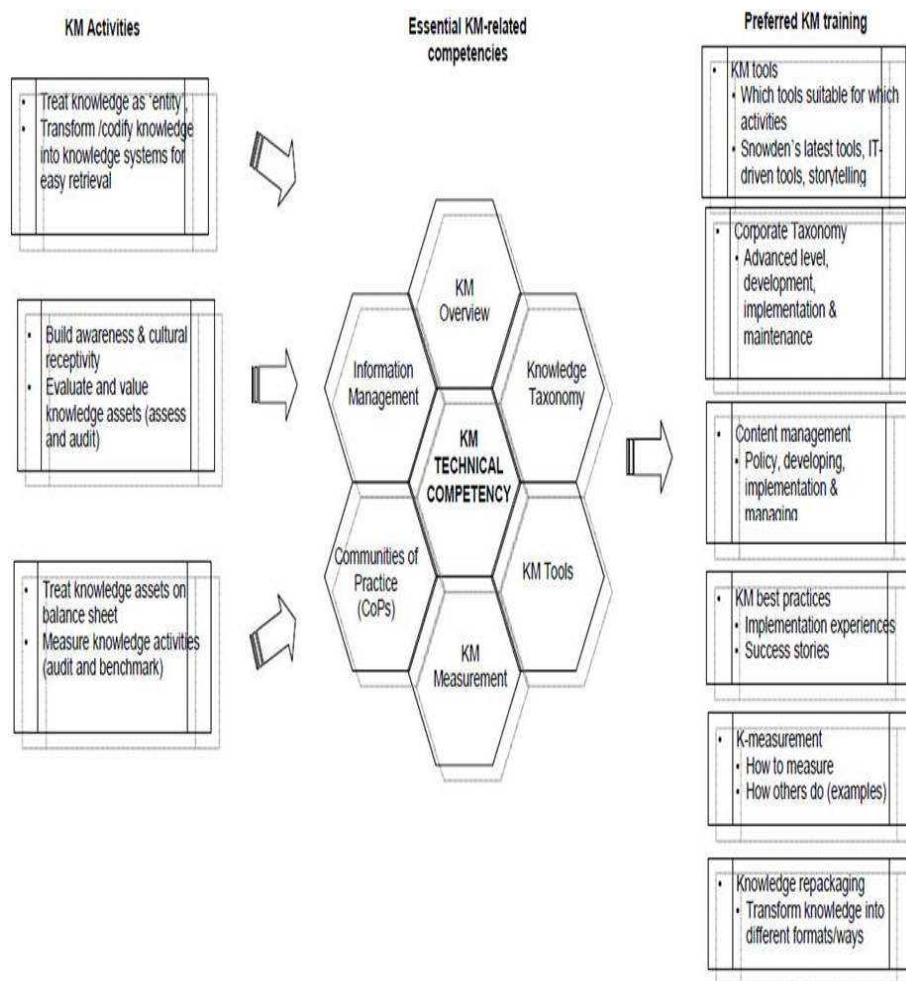


Exhibit 3 - KM Competencies and Preferred Training

Attitudes towards Certification KM Training

Most respondents expressed positive attitudes toward a certification KM training program that would lead to 'certified' KM personnel. This scenario is being influenced by the emergence of all kinds of KM certification training providers, especially those from the commercial sector, which claim to offer a 'license' for a competence

KM professional. Although they revealed that it is not a must, holding a certification from a KM program would be an advantage not just by having an in-depth KM knowledge, but also it would increase their motivation as KM officers. With the certification, they believe that it would enhance their self-confidence and reputation as KM agents. For those respondents, having a certification in the KM program might increase their

motivation by addressing their self-esteem needs, such as gaining recognitions and respects from other employees which they feel would be very helpful when introducing and promoting KM ideas or concepts in the organization. For example, they believe that respondents would have a bigger voice, which would increase confidence while some revealed that the certification would impart some kind of 'status' and 'authority' as KM officers in XYZ. Rollinson and Broadfield (2002) imply that if others indicate a favourable view of a person the same way as as the same as the person embraces himself/herself, it is an indication of a highly rewarding experience. At the same time, the respondent believes that if all KM officers at XYZ attended the certification KM training program, KM tasks would be much easier to perform since every KM officer would have the same shared understanding of KM. For some other KM officers, being given the chance to attend this kind of training would be an opportunity for future self-development plans.

However, in recent years, KM practitioners have continually debated KM certification issues. Some of the arguments are based on the nature of the KM field itself, which is very diverse and would involve a number of roles and competencies (Lambe, 2006). The author further argues that in terms of a profession, it is a team-based approach or practice instead of an 'expert' practitioner discipline. Therefore, it is unlikely to have personnel that could represent all the required competencies. Conceivably, apart from the commercial intentions, the urge to offer KM certification could be caused by the prospective outcomes that might emerge from the KM standards development which is under development by some standards organizations, such as the British Standards (BSi), Standards Australia International (SAI) and Global Knowledge Economy Council (GKEC) - an accredited Standards Development for American National Standard Institute (ANSI). Potentially, KM standards might become like the 'quality management standards' and 'environmental management' standards like the ISO 9000 and ISO 14000 series. Hence, KM standards

are looking at similar prospects as those 'quality' and 'environmental' standards or product standards.

Conversely, for KM, it is very subjective in nature since knowledge is difficult to manage, and it involves cultural issues which also are very difficult to deal with. Joseph Firestone, a consultant in the field of Knowledge Management and Information Technologies, argues, on behalf of the Knowledge Management Consortium International (KMCI) - an international professional association of KM practitioners that unlike product standards which are already hard to conform to a complex field like KM which would make it more difficult and complicated, and therefore it would definitely take a longer time for KM standards to be developed (McElroy, 2003). Even if they are successfully developed, it will then lead us to the issue of the certified KM professionals, which is where the certified training plays its role. However, Skyrme (2002) argues that it is not just inappropriate to initiate the work of developing KM standards, there should not be a certified KM program especially when that KM certified training providers need to be 'accredited'.

On the other hand, several respondents at XYZ who disagree with the certification KM programs imply that most of those KM training providers are exploiting KM and mainly aim for a commercial gain rather than contributing to the KM body of knowledge itself. In the literature, since most KM case studies are involved or associated with large consulting firms of which some are the pioneers in the KM field, people tend to believe that KM is just another marketing strategy for consultants. In fact, in some countries commercial training providers were purposely contracted by some societies especially in the US to run the certified KM programs (Lambe, 2006). In this case, the main target of these commercial providers is to make money and profit, which was also highlighted.

However, there is a suggestion for XYZ to develop their in-house KM certification.

Since every organization has its own set of KM objectives and initiatives, XYZ could therefore customize the training programs according to their own context and direction. The in-house KM certification would provide modules designed specifically according to XYZ context with three stages: Introduction, Intermediate and Advanced level. This type of training could then become one of the motivating forces that could naturally attract the employees or the so called 'knowledge worker' to participate in the organization's KM initiatives. This concept is not new. In fact, their IT- related training normally conducted in-house was designed with several levels of approach.

Implications for Future Research

The outcomes drawn from this research could be used by HR and KM personnel as a means to support their organisations in identifying KM skill gaps among KM team members. Whilst the scope of the current study is not specifically generalisable, many of the issues are likely to be relevant and these areas could be developed through further research. Many of the issues discussed in this study have potential for further development and research. They could also be used as a foundation for a research on training needs analysis in ensuring that the delivery of any kind KM training that they are conducting will fulfil the required KM skills. Research to identify appropriate KM training programs that are relevant to k-managers experience will be very useful. It is possible that it will improve the organization's KM training strategies, which include the design, development and implementation of the future KM training. Another research exploration that researchers may explore is the industry expectations for KM graduates. Therefore, the current research perhaps could become the baseline for potential research area on KM-related training and education. This will involve organizations that hire KM professions to run their KM initiatives. A number of research projects on meeting the industry demands and expectations for future graduates have been conducted in several areas, such as engineering, textile,

aquaculture, information systems etc. However, in the area of KM very little research is done as a result of the fact that the Knowledge Management field is still evolving. Therefore, the findings highlighted in this research could help to develop relevant issues on knowledge and skills of KM professions for future research.

Conclusion

The study brings together the theoretical context that was discussed in the literature in the practical context of Malaysian KM managers' experience. It is crucial for those who are responsible for managing the initiatives to have adequate skills and knowledge to perform their KM tasks. KM managers revealed that their lack of KM competencies influences their preferences towards KM-related training. The findings reveal six specific competencies, which are essential for KM managers to perform KM tasks. The six competencies include KM overview, KM tools, CoPs, Knowledge Taxonomy, Information Management and KM measurement. Although the respondents could not really specify to what level KM managers need to grasp each competency, they highlighted the issues of its importance, complexity, benefits, application and implementation elements related to the competencies. The research also highlighted the relevance of training initiatives, which equipped KM managers with appropriate KM specific skills. Although the findings might not be generalized in all types of organizations (private and public), it has imparted useful lessons as to make the implementation of KM strategy better in the future. The nature of private agencies differs in so many ways from that of government agencies. Areas of difference include structure, strategic focus, policies and culture. In general, both private and public organizations/government agencies share the same KM objectives in terms of trying to improve performance and productivity. Therefore, in both types of organizations, competency framework and training initiatives are very much related to make sure that they could capitalize their resources for better performance and productivity.

References

- Abell, A. & Ward, S. (2000). Skills for Knowledge Management: Building a Knowledge Economy London, TFPL Ltd.
- Akhavan, P., Jafari, M. & Fathian, M. (2006). "Critical Success Factors of Knowledge Management Systems: A Multi-Case Analysis," *European Business Review* 18(2): 97-113.
- Al-Hawamdeh, S. (2002). "Knowledge Management: Re-Thinking Information Management and Facing the Challenge of Managing Tacit Knowledge," *Information Research* 8(1).
- Al-Hawamdeh, S. (2003). 'Knowledge Management: Cultivating Knowledge Professionals,' Oxford, Chandos Publishing.
- Al-Hawamdeh, S. (2005). "Designing an Interdisciplinary Graduate Program in Knowledge Management," *Journal of American Society for Information Science and Technology* 56(11): 1200-1206.
- Allee, V. (1997). The Knowledge Evolution: Expanding Organizational Intelligence. Boston, Butterworth-Heinemann.
- Bearman, D. & Trant, J. (1998). Unifying Our Cultural Memory: Could Electronic Environment Bridge the Historical Accident that Fragment Cultural Collection?. Information Landscapes for a Learning Society: Networking and the Future of Libraries 3. An International Conference University of Bath, Library Association.
- Benton, T. & Craib, I. (2001). Philosophy of Social Science: The Philosophical Foundations of Social thought. New York, Palgrave Macmillan.
- Boam, R. & Sparrow, P. (1992). Designing and Achieving Competency. London, Bouthilier, F. & Shearer, K. (2002). Understanding Knowledge Management: The Need for an Empirical Perspective. *Information Research* 8 (1). Retrieved 12 April 2007 from <http://InformationR.net/ir/8-1/paper141.html>.
- Bratton, D. A. (2004). Taking on the Competition with Core Competencies. *HR Info*. Available at: <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN016543.pdf>. (Accessed: 20 September 2007).
- Brogan, M., Hingston, P. & Wilson, V. (2001). A Bounded or Unbounded Universe?: Knowledge Management in Postgraduate LIS Education. 67th IFLA Council and General Conference. Boston.
- Bushardt, S. C., Fretwell, C. & Cumbest, P. B. (1994). "Continuous Improvement through Employee Training: A Case Example from the Financial Services Industry," *The Learning Organization: An International Journal* 1(1): 11-16.
- Chaudhry, A. S. & Higgins, S. (2003). "On the Need for a Multidisciplinary Approach to Education for Knowledge Management," *Library Review* 52(2): 65 – 69.
- Chaudhry, A. S. & Jiun, T. P. (2005). "Enhancing Access to Digital Information Resources on Heritage: A Case of Development of Taxonomy at the Integrated Museum and Archives System in Singapore," *Journal Of Documentation* 61(6): 751-776.
- Cheung, C. F., Li, M. L., Shek, W. Y., Lee, W. B. & Tsang, T. S. (2007). "A Systematic Approach for Knowledge Auditing: A Case Study in Transportation Sector," *Journal of Knowledge Management* 11(4): 140-158.
- Chowdhury, N. (2006). 'Building KM in Malaysia,' *Inside Knowledge* 9 (7). Available at: <http://www.ikmagazine.com/xq/asp/sid.0/article.id.0E32BDD5-1B0A-499D-B922-C06F43E6FF2A/qx/display.htm>. (Accessed: 12th September 2007).
- Clarke, T. & Rollo, C. (2001). "Corporate Initiatives in Knowledge Management," *Education and Training* 43(4/5): 206-214.
- Coakes, E. (2005). Communities of Practice and Technology Support. In: Coakes, E. and Clarke, S. Encyclopaedia of Communities of

- Practice in Information and Knowledge Management. *Hershey, IRM Press*, 63-65.
- Cole, G. A. (1997). 'Personnel Management: Theory and Practice,' *London, Letts*.
- Corbridge, M. & Pilbeam, S. (1998). 'Employment Resorting Harlow,' *Financial Times-Prentice Hall*.
- Davenport, T. H. & Prusak, L. (2000). Working Knowledge: How Organizations Manage What They Know. *Boston, Harvard Business School Press*.
- Edvinson, L. (2000). "Some Perspectives on Intangibles and Intellectual Capital," *Journal of Intellectual Capital* 1: 12-16.
- Elizur, D. (1996). "Work Values and Commitment," *International Journal of Manpower* 17(3): 25-30.
- Friedman, G., Friedman, M, Chapman, C. & Baker, J. S. (1997). The Intelligence Edge: How to Profit in the Information Age. *New York, Crown*.
- Garavan, T. (1997). "The Learning Organization: A Review and Evaluation," *The Learning Organization* 4(1): 18-29.
- Geser, G. (2004). 'Resource Discovery - Position Paper: Putting the Users First,' *Resource Discovery Technologies for the Heritage Sector DigiCULT Thematic Issue 6*. Available at: www.digicult.info/pages/Themiss.php. (Accessed: 12 April 2007).
- Gilchrist, A. (2001). "Corporate Taxonomies: Report on a Survey of Current Practice," *Online Information Review* 25(2): 94-102.
- Gorelick, C. & Tantawy-Monson, B. (2005). "For Performance through Learning, Knowledge Management Is Crucial Practice," *The Learning Organization* 12(2): 125-139.
- Gourlay, S. (2000). "Frameworks for Knowledge: A Contribution towards Conceptual Clarity for Knowledge Management," Paper Delivered at: Knowledge Management: Concepts and Controversies Conference, Warwick University, 10-11 February 2000. Retrieved 15 April 2007 from <http://bprc.warwick.ac.uk/km013.pdf>
- Harvey, S. (2003). 'Knowledge Management: How Do You Do It?,' *Training Journal*. July: 11.
- Hoffmann, T. (1999). "The Meanings of Competency," *Journal of European Industrial Training* 23(6): 275-285.
- Housel, T. J. & Bell, A. H. (2001). Measuring and Managing Knowledge. *New York, McGraw Hill*.
- Hung, Y.- C., Huang, S.- M., Lin, Q.- P. & Tsai, M.- L. (2005). "Critical Factors in Adopting a Knowledge Management Systems for the Pharmaceutical Industry," *Industrial Management & Data Systems* 105(2): 164-183.
- Hwang, A. S. (2003). "Training Strategies in Management of Knowledge," *Journal of Knowledge Management* 7(3): 92-104.
- Iles, P. (2001). Employee Resourcing. in: Storey, J. Human Resource Management: A Critical Text, 2nd. Ed. *London, Routledge*, 133-149.
- Jennex, M. E. & Zakharova, I. (2005). Knowledge Management Critical Success Factors. Available at: www.management.com.au/strategy/str110.html. (Accessed: 12 June 2006).
- Jones, N. B., Herschel, R. T. & Moesel, D. D. (2003). "Using "Knowledge Champions" To Facilitate Knowledge Management," *Journal of Knowledge Management* 7(1): 49-63.
- Kitching, J. & Blackburn, R. (2002). The Nature of Training and Motivation to Train in Small Firms. *London, Small Business Research, Kingston University*.
- Koenig, M. E. D. (1997). "Intellectual Capital and How to Leverage It," *The Bottom Line: Managing Library Finances*, 10(3), 112-118. 10(3): 112-118.

- KPMG. (2000, 4 April 2007). 'Knowledge Management Research Report 2000,' Available at: [kpmgconsulting.com](http://www.kpmgconsulting.com). (Accessed: 16 April 2005).
- Lambe, P. (2006). KM Competencies: s KM Certification the Way to Go? Available at: www.greenchameleon.com. (Accessed: 14 April 2007).
- Lee, Y. P., Zailani, S. & Soh, K. L. (2006). "Understanding Factors for Benchmarking Adoption: New Evidence from Malaysia," *Benchmarking: An International Journal* 13(5): 548-565.
- Longenecker, C. O. & Fink, L. S. (2005) "Management Training: Benefits and Lost Opportunities (Part 11)," *Industrial and Commercial Training* 37(2): 73-79.
- Martensson, M. (2000). "A Critical Review of Knowledge Management as a Management Tool," *Journal of Knowledge Management* 4: 204-216.
- Martin, W., Wech, B. A., Sandefur, J. & Pan, R. (2006). African American Small Business Owners' Attitudes toward Business Training. *Journal of Small Business Management*. Available at: <http://www.allbusiness.com/management-companies-enterprises/3897263-1.html>. (Accessed: 12 April 2007).
- McElroy, M. W. (2003). The New Knowledge Management: Complexity, Learning, and Sustainable Innovation. *New York, Butterworth-Heinemann*.
- Milne, C. (2007). "Taxonomy Development: Assessing the Merits of Contextual Classification," *Record Management Journal* 17(1): 7-16.
- Murray, P. (2003). "Organisational Learning, Competencies, and Firm Performance: Empirical Observations," *The Learning Organization* 10(5): 305-316.
- Nargund, I. N. & Thomas, J. (2007). 'Industry Safety Information: A Knowledge Management,' *Web Resources for Chemical*.
- Newman, B. D. (2002). 'The Educations of Knowledge Professions,' Retrieved June 14, 2005, from <http://revolution.3-cities.com/~bonewman/View%20-%20Education%20the%20Knowledge%20Professions.pdf>.
- Nicholson, D., Dunsire, G. & Neil, S. (2002). "HILT: Moving towards Interoperationality in Subject Terminologies," *Journal of Internet Cataloguing* 5(4): 97-111.
- Ow, F. C. K. (2001). 'Achieving Sustainable Performance by Leveraging on Knowledge - An Organization Behavioural Approach,' Paper Presented at the Knowledge Management Seminar of Knowledge Management Asia. Kuala Lumpur.
- Pastors, K. (2007). "Consultants: Love-Hate Relationships with Communities of Practice," *The Learning Organization* 14(1): 21 - 33.
- Pemberton, J. D., Mavin, S. & Stalker, B. (2007). "Scratching Beneath the Surface of Communities of (Mal) Practice," *The Learning Organization* 14(1): 62-73.
- Pemberton, J. D. & Stonehouse, G. H. (2000). "Organisational Learning and Knowledge Assets - An Essential Partnership," *The Learning Organization*. 7(4): 184-193.
- Pemberton, J. D., Stonehouse, G. H. & Francis, M. S. (2002). "Black and Decker - Towards a Knowledge-Centric Organisation," *Knowledge and Process Management* 9(3): 178-189.
- Pfeffer, J. & Sutton, R. I. (1999). "Knowing What to Do Is Not Enough: Turning Knowledge into Action," *California Management Review* 42(1): 83-108.
- Place, U. T. (1997). "Linguistic Behaviorism and the Correspondence Theory of Truth," *Behavior and Philosophy* 25(2): 83-94.
- Plessis, M. D. (2007). "Knowledge Management: What Makes Complex Implementation Successful?," *Journal of Knowledge Management* 11(2): 91-101.

- Pratt, D. (1980). *Curriculum: Design and Development*. New York, *Harcourt Brace Jovanovich*.
- Psarras, J. (2006). "Education and Training in the Knowledge-Based Economy," *VINE: The Journal of Information & Knowledge Management Systems* 36(1): 85-96.
- Read, C. W. & Kleiner, B. H. (1996). "Which Training Methods Are Effective?," *Management Development Review* 9(2): 24-29.
- Roberts, P. B. (2006). "Analysis: The Defining Phase of Systematic Training," *Advances in Developing Human Resources* 8: 476-492.
- Robertson, J. (2004). *Choosing Your Information Delivery Channels*. Available at: www.stepwo.com.au/papers/cmb_delivery_channels/index.html. (Accessed: 12 April 2007).
- Robinson, M. A., Sparrow, P. R., Clegg, C. & Birdi, K. (2007). "Forecasting Future Competency Requirements: A Three-Phase Methodology," *Personnel Review* 36(1): 2007.
- Rodov, I. & Leliaert, P. (2002). "FiMIAM: Financial Method of Intangible Assets Measurement," *Journal of Intellectual Capital* 3(3): 323-326.
- Rollinson, D. & Broadfield, A. (2002). *Organizational Behaviour and Analysis: An Integrated Approach*. Harlow, England, *Financial Times-Prentice Hall*.
- Schippmann, J. S., Ash, R. A., Battista, M., Carr, L., Eyde, L. D., Hesketh, B., Kehoe, J., Pearlman, K., Prien, E. P. & Sanchez, J. I. (2000). "The Practice of Competency Modelling," *Personnel Psychology* 53: 703-740.
- Singh, S. P. (2007). "What Are We Managing - Knowledge or Information?," *Journal of Knowledge Management* 37(2): 169-179.
- Skyrme, D. J. (2002). *Making the Business Case for Knowledge Management: As Simple as ABC? I3 UPDATE / Entovation International News* (52) Available at: http://www.skyrme.com/updates/u52_f1.htm. (Accessed: 26 April 2006).
- Steward, T. A. (1997). *Intellectual Capital: The New Wealth of Organizations*. New York, NY, *Currency-Doubleday*.
- Sveiby, K. E. (1997). *The New Organizational Wealth: Managing and Measuring Intangible Assets*. San Francisco, CA., *Berret Koehler*.
- UNIDO (2002). *UNIDO Competencies Part One: Strengthening Organizational Core Values and Managerial Capabilities*. Available at: <http://www.undo.org/organization>. (Accessed: May 26, 2003).