Knowledge Management in Real Estate Consultancy Firms: Breaking through the Barriers

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Abstract

Corporate knowledge is well accepted as a decisive asset in most countries worldwide. The know-how and expertise of the work-force is an important factor for the success of companies and strongly influences the effectiveness and efficiency of the business processes and their outcome. In real estate consultancy firms, knowledge management (KM) is specifically relevant due to the knowledge intensive character of delivering the services to be rendered to clients, which can demand innovative and non-repetitive processes. However, there are barriers that need to be overcome so that the potentials of KM are capitalized.

Key Words: Knowledge Management, Barriers, Approaches, Real Estate Consultancy Firms

Introduction

Knowledge management can be summarized as the processes and tools that allow an organisation to efficiently capture, maintain, and utilise its information. By organising information and keeping it current, an organisation significantly decreases time lost on the dreaded "reinvention of the wheel". Organizations are now viewed as bodies of knowledge thus creating a new perspective on organizations (Nahapiet & Ghoshal, 1998). It has been recognized that the economic prosperity of an organization depends on the effective exploitation and retention of this organizational knowledge. Teece (1998) suggests that knowledge assets underpin competences and competences in turn underpin the firm's product and service offering to the market.

This paper examines the barriers to KM, which can be said to mean the obstacles in applying the individual and collective knowledge and abilities of the entire workforce to achieve specific organizational objectives. But before barriers can be identified, the concept and principles of KM must first be understood. KM depends on both the cultural and technological processes of creation, storage, sharing and transfer. The goal of KM is not to manage all knowledge; rather it is to manage the knowledge that is most important to the organization. Efficiencies occur when the right knowledge gets to the right people at the right time. Bell (2001) indicated that KM is crucial because it points the way to comprehensive and clearly understandable management initiatives and procedures. It is believed that success in today's competitive marketplace depends on the quality of the knowledge and knowledge processes those organizations apply to key business activities. Therefore it is significant to identify the barriers that may hinder the success or slower the success rate in organizations, particularly real estate property consultancy firms which has been identified in this study.

Objectives of the Study

It has been recognised that professional service businesses, such as property consultancy and valuation surveying industry, differ significantly from traditional manufacturing organizations (Eccles & Crane, 1988; Mills, 1986; Thomas, 1978). Despite the acknowledged difference, much of the derived from traditional industrialized organizations can be of questionable pertinence. By applying the emerging knowledge-based view of these firms and investigating the current status and the practices of knowledge management in PCVS (Property Consultancy, Valuation and Surveying) firms, the study will provide an insight for the future directions of this management approach in this sector.

In addition, knowledge management has three basic elements: people, technology and the process (UNFPA, 2002; 2003). Based on the characteristics of the professional, identities of the people, and the progressive implementation of information technology in these firms, this study attempts to explain the heterogeneity of the processes of knowledge management. Therefore, the objectives of the study are as follow:

i. To ascertain the awareness of knowledge management in Property Consultancy and Valuation Surveying (PCVS) firms in selected towns/cities in Peninsular Malaysia
ii. To investigate the current practices and barriers faced in managing knowledge in these firms

Principles of Knowledge Management

Knowledge management (KM) first established itself as a distinct area of management science in the early 1990s (Prusak, 2001). KM is an amalgam of concepts borrowed from the artificial intelligence/knowledge-based systems, software engineering, business process reengineering, human resource management and organizational behavior fields. Knowledge can be broadly grouped into two types: tacit knowledge and codified knowledge. Tacit knowledge is usually unwritten and embodied in individual. It is accumulated through education, training and general working experience involving, say apprenticeship and how market works. Codified knowledge unlike tacit knowledge is written down. Scientific formulae and software programs are examples of codified knowledge. Codified knowledge is more easily diffused and transferred (ISIS, 2002). Codified knowledge is also termed as explicit knowledge (Kermally, 2002). According to Alavi and Leidner (1999), information becomes knowledge once it is processed in the mind of the individual. This knowledge then becomes information again once it is articulated or communicated to others in the form of text, computer output, spoken or written words or other means. In moving towards Knowledge-based economy, the Organization for Economic Cooperation and Development (OECD, 2001) has considered the knowledge-based (K-based) industries within the medium-high technology industries to include professional, scientific, measuring and controlling equipment. Thus the professional services rendered by PCVS firms fall within the K-based industries identified by OECD.

Marketplaces are increasingly competitive and the rate of innovation is rising, and organizations compete on the basis of knowledge. KM is an important source for competitive advantage for organizations (Ginsburg & Kambil, 1999). Knowledge embedded in the organizations' business processes and the employees' skills provides the organization with unique capabilities to deliver customers with a product or service.

In capturing the knowledge from the employees within an organization, Samuells (2001) has highlighted that effective KM programmes can help to improve the efficiency of knowledge-intensive organizations such as real estate

organizations. PCVS firms are comparable to practices of law firms that are heavily service- intensive. Terret (1998) indicates that significant hurdles have to be overcome in order to embed successful knowledge management. In the law firm context, all these hurdles may be categorized under the heading of firm culture: individuality, time, success and lack of incentives. In a survey of 431 US and European organizations, culture was found to be the biggest impediment to knowledge transfer (Ruggles, 1998). In addition, Ruggles (1998) mentions that the other impediments were the failure of top management to set priorities, and the lack of shared understanding of business strategy model.

Barriers to Knowledge Management

Along with the processes of knowledge management, many barriers exist, which thus turn the management of knowledge into a very challenging task as illustrated in Figure 1. A barrier is said to be as everything related to human, organizational and/or technological issues that obstruct the intra- and inter-organizational management of knowledge (Pawar et. al., 2000). According to Brandt and Hartmann (1999), these barriers can be categorized as the TOP (Technology, Organization, People) categories of socio technical systems classification. Bonfield (1999) identifies four areas as potential organizational barriers when implementing a knowledge management initiative: cultural; technological; economical and, marketplace barriers.

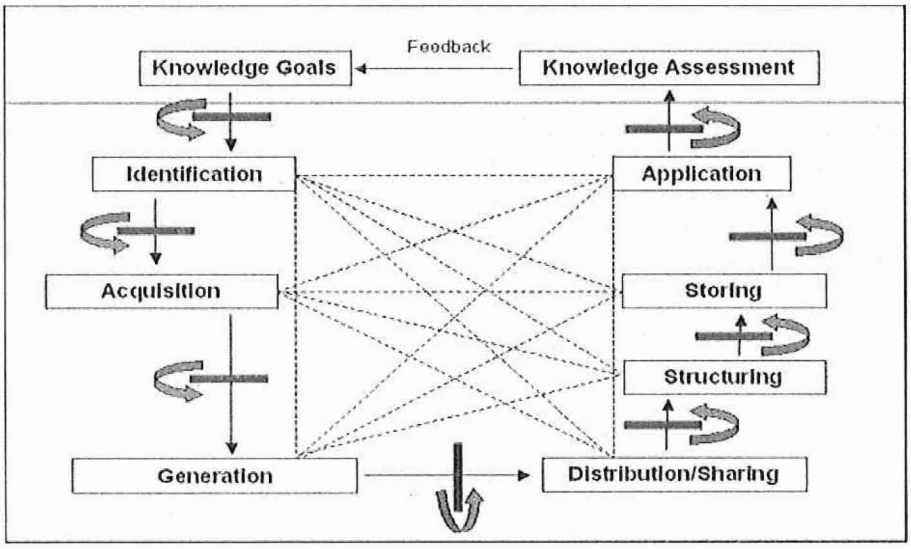

Figure 1: Knowledge Management Challenges
Source: Wunram et.al., (2001 : p.10)

- *Barriers related to Technology* that relates to software systems. The possibilities to overcome this barrier are either the identification of a system that satisfies the needs of the organisation.
- *Barriers related to Organisation* which relates to the lack of awareness of knowledge management strategies and instruments, high investments in relation to the requirement of significant

amounts of time and money, unavailability of getting the right individuals at the right time.

- *Barriers related to People* which relate to different languages, fear of penalty/fear of losing profile, idea robbery which can implies the need for the protection of proprietary knowledge among employees, establishment of communication channels and good relationships amongst staff.

According to Ndela and Du Toit (2001), people-related issues such as people's unwillingness to share their knowledge and lack of leadership commitment, as well as time and resource constraints could be barriers to implementing a KM programme. Another core barrier emphasised in numerous studies is the culture of an organisation. Sveiby (1997) compared corporate culture to a company's 'spirit' reflected in its goal orientation and dominated by, for instance, financial figures, innovations based on R & D, or a strong marketing culture with a strong customer focus. Corporate culture determines the degree of interaction used to accomplish work, on vertical or horizontal level. McDermott and O'Dell (2001) emphasise the importance of integrating knowledge sharing into existing values and the overall style of an organisation to reach a high interaction on both levels, rather than changing the corporate culture to suit knowledge sharing.

Pragmatic Approaches to Overcoming the Barriers

Malhotra (1998) have reported the different studies in which no direct correlation between IT investments and business performance or knowledge management were identified. He emphasises that the organisational processes and the way the employees communicate and operate through the social processes of collaborating need more attention. Davenport and Prusak (1998) reported that some Japanese companies have installed "Talk Rooms" in which scientists come together to have a cup of tea and talk to each other for about half an hour. There is neither an agenda nor schedule and the only target is to bring these people together to evoke a discussion about their current work and to exchange ideas.

The following cases (Tables 1 to 3) as quoted from Malhotra (1998) show how pragmatic approaches were implemented in various levels of organisation. These are common problems identified and pragmatic approach is suggested for each of the following problems. Perhaps this can be applied to PCVS firms as well.

Table 1: Managing knowledge within a process chain

Problem	Pragmatic Approach
Insufficient communication and coordination along the process chain caused by the application of the so-called "Throw it over the wall" approach.	Specification of rough but commonly agreed documentation forms. Incremental Approach: From an early implemented paper based solution to a database application. Forms were made accessible for all employees involved in the process chain by an Intranet application.

Table 2: Management of design knowledge between design and assembly

Problem	Pragmatic Approach
Insufficient feedback of problems and experiences identified in the assembly area to design department	Easy to use technologies (digital cameras and Intranet) for a quick documentation of problems and failures.

Table 3: Approaches to KM in an R&D department

Problem	Pragmatic Approach
Flat learning curve of novices Lack of communication of non project specific information and knowledge	Personnel coaches Programmers Round Table
Identification of knowledge "hidden" in other projects	Specification of identical directory structures up to the fourth level for all types of projects. Further detailing of the structure would have generated to high efforts
Time consuming no value adding tasks related to project management activities. Frequent disturbance of experts related to tips and tricks requested by colleagues	Documentation and provision of "How to´s" on t

Source: Modified from Malhotra (1998: p.12)

Barriers to KM in Real Estate Consultancy Firms

The surveying industry has a long history and is knowledge-intensive in nature. The challenge of managing knowledge has always been the key issue underpinning the existence, growth and further development of surveying firms. New challenges and opportunities in a highly competitive environment have provided further incentives for surveying firms to acquire and maintain a unique base of knowledge, both explicit and tacit, gathered from their employees and associates.

General practice surveying firms display the typical characteristics of professional services firms (PSFs) (Fong,2003). PSFs are frequently classified as 'knowledge-intensive' firms, the latter being defined as 'companies where most work can be said to be of an intellectual nature and where well-educated, qualified employees form the major part of the workforce' (Alvesson, 2000). In Malaysia, the surveying sector has a strong and unifying identity reflecting the status of the main professional body, and the resulting high level of professionalization, which may sometimes act as a barrier to KM (Matzdorf & Price, 2000). The identified barriers to the organizational learning in the chartered

surveying profession as identified by Matzdorf & Price (2000) are: emphasis on individual learning; 'learning equals training'; learning equals lack of knowledge attitude; an imprecisely defined but all pervading notion of professionalism; competition; and the complex or even contradictory nature of the professional bodies. Those unwritten rules within the profession that work against organizational learning, the traditional hierarchical structure within the profession and in the surveying firms, learning as a cost factor rather than an investment; and individuals' prior experiences of learning. It is further found that those barriers stop individuals, groups and entire organizations from developing their potential. According to Dawson et al. (2000), technology is a critical factor in the effective delivery of professional service. Similar to the situation in other industries, the existence of an advanced information technology infrastructure has helped surveying firms to collaborate internally and externally much more efficiently.

Research Methodology

In the initial stage, a literature review was carried out to identify secondary sources and data to provide a broad and indicative account of the KM field and to establish a linkage between KM and PCVS firms. In reference to an earlier study conducted for general practice surveying firms in Hong Kong and UK (Fong 2003), the relevant factors identified were adopted in this study due to similar environmental and regulatory nature of those firms with Malaysian firms. Property consultancy, valuation & surveying firms identified were gathered through a list firms registered with the Board of Valuers, Appraisers and Estate Agents. Due to the geographical distance, it was decided that a mixture of distribution approaches were utilized i.e. hand delivered and mail delivered questionnaires. One hundred (100) questionnaires be distributed to various firms throughout Malaysia, but only 34 responded to the questionnaire. The study focuses on the firms in major cities in Peninsular Malaysia, namely, in Kuala Lumpur and Shah Alam, Johor Bahru, Georgetown, Ipoh, Kuantan, Kuala Terengganu and Kota Bahru. The response rate of 34% is considered appropriate based on Ellhag & Boussabaine (1999) and Idrus & Newman (2002). Weightages are given for questions that require respondents to rate the answer numerically. The weightages used are:1= very important; 2= moderately important; 3= important; 4= least important and 5= not important. The data gathered from the survey were analysed by applying descriptive statistical techniques.

Analysis and Discussion of the Findings

Awareness of Knowledge Management (KM)

Table 4 shows the general ranking of the awareness towards KM.

The most important aspect of awareness of KM is 'major new strategic imperative for staying competitive' as it received the lowest mean of 1.66 from the total score of survey. Marketplaces are increasingly competitive and the rate of innovation is rising, and organizations compete on the basis of knowledge. As such, the respondents acknowledged that KM is the strategic way to stay competitive.

The second most important aspect of KM with rating of 1.69 is valuable way to organize and use corporate information. New spin and technology, and other aspects, even though received lower ranking in the survey are still considered as important due to the fact that each aspect needs to be treated for further understanding of KM implementation.

Table 4: Awareness of KM - Perception

Ranking	*Awareness of KM*	*Mean Score*
1	Major new strategic imperative for staying competitive	1.66
2	Valuable way to organize and use corporate information	1.69
3	Latest management fad	1.75
4	New spin and technology	2.33

Source: Field Survey, 2005

Goals of KM

As shown in Table 5, respondents are of the opinion that the main motivator for implementing KM is to improve work efficiency. It is perceived that the respondents appreciate that KM is a way to enhance the professionals' services rendered by the firms. It also indicated that, improving knowledge sharing horizontally comes second rank in importance, followed by increasing customer satisfaction and reducing cost. No factor shows the mean score of more than 3.0. This means that the respondents did not dispute that all the motivating factors given are important.

Table 5: Goals of KM – the main motivators for implementing KM

Ranking	*Motivating Factors*	*Mean Score*
1	To improve work efficiency	1.43
2	To improve knowledge sharing horizontally	1.77
3	To increase customer satisfaction	1.90
4	To reduce cost	2.06
5	To improve knowledge sharing vertically	2.12
6	To increase market share	2.27
7	To encourage innovation	2.31
8	To increase employee satisfaction	2.40
9	To make up for loss of knowledge	2.76

Source: Field Survey, 2005

Barriers to Implementation of KM

Table 6 itemised the nine listed barriers to implementation of KM in organization to be determined by the respondents. The respondents were of the view that the main barriers to KM as being time consuming, lack of funding, dilution of responsibility,lack of IT skills,lack of senior management support are ranked 2nd to 5th respectively. The other identified barriers, KM and benefits unknown; no incentives to share; and possible downsizing factors are at lowest rank. However, the least influential to KM's implementation is problem associated with other matters which are not described by the respondents. The findings show that the current culture of the firms does not facilitate KM as indicated by the identified factors.

Table 6: Barriers to Implementation of KM

Ranking	*Barriers*	*Mean Score*
1	Time consuming	1.72
2	Lack of funding	2.54
3	Dilution of responsibility	2.71
4	Lack of IT skills	2.80
5	Lack of senior management support	2.82
6	KM and benefits unknown	2.91
7	No incentives to share	2.95
8	Possible downsizing	3.31

Source: Field Survey, 2005

Source of Knowledge

As shown in Table 7, the respondents agreed that personal experience is the main source of knowledge for KM. This was evidenced by mean score of 1.93. While "others" source achieved 4.0 mean score, which can be considered as least important, others listed sources achieved mean score of less than 3.0. This means that all sources available are important. Based on the above data, most of them agree that listed sources of knowledge for KM is based on human, meaning that the staff need to acquire knowledge through their personal experience, linkages with others, and interactions.

Table 7: Sources of Knowledge

Ranking	*Sources of Knowledge*	*Mean Score*
1	Personal experience	1.93
2	Research and development dept.	2.06
3	Colleagues' experience	2.11
4	Other resources, incl. internet, journal, books	2.13
5	External courses	2.25
6	Interaction with outside party	2.38
7	Internal courses	2.41
8	Company library	2.91

Source: Field Survey, 2005

Discussions of Findings

Through the study, it is noted that PCVS firms have acknowledged that they viewed major new strategic imperative for staying competitive as the most important aspect of KM. Therefore these firms have acknowledged the importance of KM and that organizations must compete on the basis of knowledge.

The main motivator for implementing KM amongst PCVS firms is to improve work efficiency and to improve knowledge sharing. It is interesting to note that the respondents did not dispute that the motivating factors used to be of significant importance revealing the awareness of the importance of implementation of KM. However, in the implementation of KM, the respondents have viewed that time factor as in time consuming to be the main barrier. Lack of funds and dilution of responsibility that posed as the other important barriers may place the use of IT as KM tools, which were perceived by the respondents as ones that threaten the current practice of generating and sharing knowledge.

There is no direct correlation existed between investments of time and money in new technologies and an increase of productivity of a company. According to Malhotra (1998), investing time and money solely in technology has to be considered as short run programme, especially when aiming to overcome the barriers to knowledge management. As explored by Picot (2000), the "productivity paradox" can be explained for the purpose of supporting the concept of pragmatic approaches:

Insufficient reorganisation of company processes: the implementation of new technologies in companies merely for the sake of modernism will probably lead to high investments without making use of the full potential of such technologies. Therefore, companies should tend to better exploit available resources. Further, the application of technology, independent from being new or old should always be considered together with human and organisational aspects.

Resistance against renewal: Employees usually tend to have a natural resistance against changes. If too many aspects in their environment are changed at the same time they feel insecure and will probably not co-operate with the change inducing power. In the case of the productivity paradox the resistance will arise when new technologies are introduced and along with it organisational changes. Thus, the authors conclude that instead of solely looking on the introduction of new technologies to solve problems in knowledge management, companies should also focus on simple organisational or methodical measures. Probably a smooth approach to KM is the key for the introduction of further KM measures. In order to accustom the employees to the philosophy of KM managers should prefer 80% solutions for the sake of acceptance and the willingness to introduce further measures.

In investigating the sources of knowledge available in these PCVS firms, a majority of the respondents agreed that personal experience is the main source of knowledge. They also agreed that knowledge is shared through face-to- face/informal communication. The respondents have indicated that a proper support mechanism is needed to promote knowledge sharing and individual performance review is the main incentive given for sharing of knowledge.

This study shows that the main challenge regarding KM implementation in PCVS firms stems from employees' lack of understanding of KM and the benefits it offers. Another problem is associated with knowledge sharing. To facilitate or smoothen the process, firms could develop organizational thrust using sanctions or policies and strong culture; alternatively, they could promote interpersonal trust such as knowledge-based trust, identification-based trust and relational trust (Das & Teng, 1998).

Firms should strike a balance between people and technology elements of KM. A good technology-based KM system need not be complicated or capital-intensive, in so far as it could serve the core business by providing internal information within a group and sharing customer-specific information with clients. The surveying sector is characterized by a wide variety of different types of consultancy services. Careful attention needs to be paid to the selection of tools that are appropriate for different sectors, particularly those with severe resource constraints. It should be further noted that the best tools and processes alone cannot achieve a KM strategy. Ultimately, KM aims to free up professional valuable time to focus on creating thoughtful and innovative approaches, rather than on data capture from disparate sources.

The results of this study should be considered as indicators of the current awareness and practices of KM in PCVS firms, rather than as definitive findings. The convenience sample from which the data were derived is too small for hard statements in this regard. Results are also subject to limitations arising from the time frame, use of questionnaire and its different delivery mode. It was not possible to control the settings in which the questionnaires were completed, nor to identify potential factors that may have had an impact on the results. However, these results do suggest certain number of practices in PCVS firms in selected towns/cities in Malaysia with regard to KM and they serve as a foundation for more refined investigation in the future.

Conclusion

By describing several barriers to knowledge management, the existence of the relevance of barriers related to human aspects can be identified. In contrast to usual approaches to knowledge management in which the implementation of ICT infrastructures play a central role, the concept of pragmatic approaches for KM has been applied.

Generally, this study shows that the main challenge regarding KM implementation in PCVS firms stems from employees' lack of understanding of KM and the benefits it offers. Firms can address this challenge by making training, changing management and processes and redesigning primary components of the KM initiatives through the support of the top management and allocation of fund. Working with rather than against the barriers is an art required.

It can be concluded that a highly participative approach (i.e. direct involvement of concerned employees) is of utmost importance for the acceptance of any solution in this particular area. However, pragmatic approaches in general also bear a strong risk. People may be tempted to implement the first solution they see without carefully reasoning its appropriateness and usability. If KM solutions aim to support a better cooperation between design and manufacturing fail, it gets more difficult to motivate the users to participate in a second approach. Thus, in contrast to trial –and-error solutions, the potential error must be avoided as far as possible. In order to exploit pragmatic approaches with a reduced risk, future research should aim to develop methods and tools for KM which allow for the identification of the most relevant aspects to be addressed by pragmatic solutions.

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