

## **Knowledge Management Strategy in Property Management : A Review**

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### **Abstract:**

This paper describes the theoretical approach the concept of knowledge management to be implemented in property management companies in Malaysia. The KM strategy which is a conceptual model for this paper, formulated from various literature surveys. This will then be a conceptual model for this study. This study is based on conceptual design framework on knowledge management approach for property management companies. Case study will be among registered property management companies registered with Board of Valuers, Estate Agents and Appraisers (BOVEA). Knowledge Management is relatively a new terminology for in real estate industry. Theoretically, it will enhance the performance the organisation in many ways. This study will give significant contribution to the property management industry in Malaysia. As business environment is evolve which knowledge is vital, property management players should participate in globalisation changes. This concept will in turn revolutionise organisation into more innovative and competitive companies.

**Keywords** - Knowledge Management Strategy, Property Management, Theoretical.

### **INTRODUCTION**

Dixon (2005), highlighted during the late 1990s, that there was increasing debate over the emergence of a 'new economy', built on major structural changes driven by globalisation and information and communication technology. He added the trend was away from tangible physical assets towards intangible goods, such as knowledge and information. Consequently, it also reflects the real estate business nowadays. Traditionally, real estate businesses are engaged with land, money, location, value, property and estate. Dixon also propagates of the new economy which now takes place in a globalisation environment, driven by technological change in alliance with other forces (Dixon, 2005). Knowledge management is a way of management methods which consists of people, technology and organisation elements to capture information economy and organisation's valuable asset. Hence, it is believed to contribute for the betterment of the real estate industry. In real estate business, the biggest problems are the separation between knowledge and task. It is because real

estate industry is very broad and diverse in terms of job and functions within the industry. Appraisers, loan officers, escrow offices, title associates, real estate lawyers, accountants, agents, brokers represents some of the diverse work environments in the real estate industry (Chan & Kleiner, 2005). Each of the tasks has its own characteristics and involved knowledge creation and diversification. For instance, for real estate brokers, it is not an easy task interviewing potential candidate. They need to understand the different aspects of the management role in a real estate office (Chan & Kleiner, 2005). Moreover, they have to digest all information and current situation in property market to keep track the business environment. With this situation, the real estate industry has to step forward to embrace knowledge management concept. This will take place in real estate environment as intermediaries with all information, management tasks as well as external and internal attributes in real estate.

According to Diakoulakis et.al (2004), knowledge management has been gradually established as a strong methodology to support business viability, competitiveness and growth. Grenon (2000), described knowledge management is tools to aiming to provide a framework for anticipating the unknown. While Rubenstein (2001), defined knowledge management is a conceptual framework for problem-solving that considers problems in their entirety. In addition, knowledge management can be viewed as a conceptually complex, evolving, broad umbrella of issues and viewpoints (Smith, 2004). In organisations, knowledge needs to be captured, interpreted and eventually transferred into useful manners for organisation, for example, human skills, expertise, and relationships which are can be categorised under tangible assets. The bottom line of knowledge management concepts is knowledge itself. Civi (2000) defined knowledge as intellectual capital of a firm and it also very critical. Beyond brand name and physical assets, a corporation gains knowledge from years of experience in such things as property management, estate agents, valuers and appraisers. This cumulative experience, together with information gathered from outside sources, constitutes one of the firm's critical resources. Nonaka and Takeuchi (1995) differentiate knowledge management model into 4 models which are as follows (see figure 1):

- i. Tacit knowledge to tacit knowledge which is called socialisation. It is process of sharing experiences which creates tacit knowledge such as shared mental models and technical skills.
- ii. Tacit knowledge to explicit knowledge or externalisation. It is a knowledge creation process in that tacit knowledge becomes explicit, taking the shapes or metaphors, analogies, concepts, hypothesis or models.
- iii. Explicit knowledge to explicit knowledge or combination. It involves combining different bodies of explicit knowledge.
- iv. Explicit knowledge to tacit knowledge or internalisation. It is a process of embodying explicit knowledge into tacit knowledge and is closely related to 'learning by doing'.

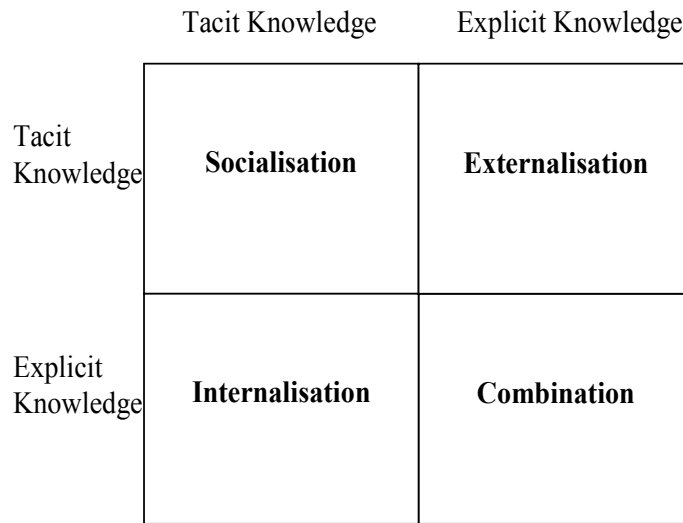


Figure 1: Four modes of knowledge conversion (Source: Nonaka and Takeuchi, 1995).

## KNOWLEDGE MANAGEMENT STRATEGY CONCEPT

In this paper, there are four areas that need to be focused to develop KM strategies in an organisation based on frameworks developed by several authors. The four areas are;

### i. **Organisation**

In an organisation, KM strategy will create an environment that is well suited for more effective knowledge generation, maintenance, and distribution which can be established. KM will transform individual into collective knowledge and vice versa, which institutionalise the KM-related processes.

### ii. **Infrastructures and Technology**

Infrastructure and technologies will support all KM processes. The level of ICT support and the kind of ICT infrastructure needed by a consulting firm, depend on its KM strategy. The core elements of suitable architecture are a central electronic repository of explicit knowledge focusing on knowledge as an object (Zack 1999, Maier & Remus, 2003). The repository contains databases for best practices, case studies, methods, articles, etc. For the implementation, maintenance and constant

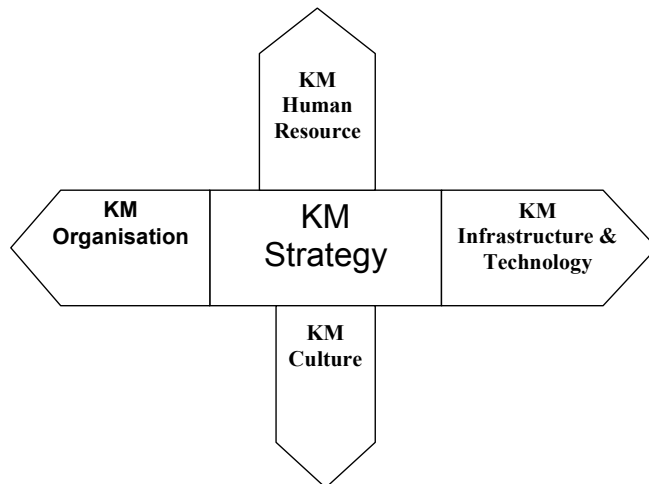
improvement of the repository, document management, content management and workflow management systems are essential.

**iii. Culture**

Culture is the way a group perceives thinks and feels in relation to problems and acquired when a group solves a problem (Fitzek, 1999). Culture in each of companies might be different with one another even though they are under the same umbrella. Therefore, organisational culture is an important factor for the success of KM. Culture can encourage openness, knowledge sharing and mutual support among employees, while generating attitudes like altruism, trust, error tolerance, and understanding.

**iv. Human Resource**

Human resource is one of the major elements in an organisation to execute all the businesses and operations. For a successful KM strategy, it needs training curriculum that familiarise employees with all internal KM services as a central measure. The derivation of concrete knowledge goals, from a corporate level down to each individual, is a central technique of corporate knowledge and employee skill management. Often, training programs are derived from knowledge goals and it can be integrated into KM elements.



**Figure 2: KM Strategy Conceptual Model for Property Management  
KM Organisation Strategy**

Roberston (2004) described every organisation has a unique environment, defined by factors such as:

- i. Purpose and activities of the organisation
- ii. Overall strategic direction
- iii. Organisation culture
- iv. Size of the organisation
- v. Geographic spread
- vi. Staff skills and experience
- vii. Organisational history
- viii. Available resources
- ix. Marketplace factors

Soliman and Spooner (2000) suggested that a key element in the business case is deciding how to apportion efforts aimed at harnessing tacit knowledge versus explicit knowledge. He added and recommended that company using the 80:20 rules, i.e. spending 80 percent of resources one approach and 20 percent on the other. In addition, organisation needs to distinguish between data, knowledge and information. According to Bhatt (2001) data, information and knowledge can only be distinguished from a user's perspective. He added, data are considered as raw facts, information is regarded as an organised set of data, and knowledge is perceived as meaningful information. For the purpose of this research, KM activities have been identified to stipulate level of KM organisation activities in property management.

## **S2 KM Technology Strategy**

Infrastructure and technologies could support all KM processes. The level of ICT support and the kind of ICT infrastructure needed by a consulting firm, depend on its KM strategy. The core elements of suitable architecture are a central electronic repository of explicit knowledge focusing on knowledge as an object (Zack 1999, Maier & Remus, 2003). At present, the emerging technology in business world is e-commerce. According to M.M Helms *et al* (2008), e-commerce includes business-to-consumer (B2C), business to business (b2b) and internal business interaction via an Intranet. They added, both e-commerce and knowledge management rely on the Internet. In real estate, e commerce has already used widely in retail property. However, in property management it is still at the foundation leg. Thomson (2005) suggested that sophisticated analytical tools have emerged to help companies address optimisation of their supply chain networks. He added, these tools allow companies to model existing and alternative supply chain networks and identify the trade-offs in cost, service and time that must be made in developing a supply-chain strategy that optimise their competitive position. However, the challenge is to make a distinction what type of

infrastructure and technology KM strategy is suitable for property management. Hamilton and Selen (2004) suggest establishing web interfacing using quality function deployment (QFD) to improve service chain network in real estate. QFD provides a chain like interface between customer needs, engineering, or design characteristics, parts characteristics, key process interfaces for each real estate property (Hamilton and Selen, 2004). From the literature review survey four items have been identified to be as test variables in property management. Sub items are created under each item to specify activities of KM Infrastructure and Technology strategy.

### **S3 KM Culture Strategy**

Culture is the way a group perceives thinks and feels in relation to problems and acquired for a group solves a problem (Fitzek, 1999). In knowledge management context, it refers to changing corporate culture and business procedures to make sharing of information possible (Bhatt, 2001). According to Barney (1986), organisations which have a culture that supports and encourages cooperative innovation should attempt to understand what it is about their culture that gives them a competitive advantage and develop and nurture those cultural attributes. This further supported by Park et al (2004) who mentioned that cultural change is extremely difficult, time consuming and frustrating process for organisation. Lopez et al (2004) outlined collaborative culture that need be stresses in knowledge management culture;

- i. a long term vision and advance management of the change
- ii. communication and dialogue
- iii. trust and respect for all individuals
- iv. teamwork
- v. empowerment
- vi. ambiguity tolerance
- vii. risk assumption
- viii. respect and diversity encouragement.

(Lopez et al, 2004)

However, Park et al (2004) stressed out that deep assessment of an organisational culture requires more than a questionnaire. He added, learning about the history of the company, visiting the place, talking to employees and observing behaviours can be more effective. The key to create organisational learning culture through KM lies in the exchange of mental models and their institutionalisation in a firm's operational structure by transforming the rules of decision that until then have dominated its behaviour, thus enabling it to carry out

more effective actions (Lopez et al, 2004). The term social complexity is assert by April (2002) refers to KM culture. Social complexity is when the source of advantage is known, but the method of replicating the advantage is unclear (April 2002). She added, social complex responsibility combinations depends upon large numbers of people or teams engaged in co-ordinated action such that few individuals, if any, have sufficient breadth of knowledge grasp the overall phenomenon.

#### **S4 KM Human Resource Strategy Strategy**

Human resource is the most vital component in organisation. Because of human character itself is too complex, thus to manage human in organisation is difficult. Traditionally, firm constantly measure performance based on tangible assets such numbers of employees and assets. However, as the globalisation takes place, the term of intellectual capital is emerged. Organisation should facilitate knowledge sharing among staff. Hislop (2002) found out three major elements that organisational commitment may affect a number of attitudes and behaviours relevant to the management and sharing knowledge

- i. attitudes of worker towards knowledge-sharing activities
- ii. extent to which workers actively participate in KM and knowledge sharing activities
- iii. loyalty of workers to their organisation and the likelihood that they will choose to remain with it.

(Hislop, 2002)

According to Aliaga (2000), the distinguish characteristics of human capital (for example, ideas, training) is that it is tangible. He added, from an economic perspective, human capital encompasses both knowledge and intellectual capital because both are intended revenue for the firm. In addition, Soliman *et al* (1999) recommended the following strategy for managing the human resources knowledge:

- i. reviewing the drivers and strategies for human resources knowledge management efforts
- ii. gaining the commitment and understanding from human resources executives
- iii. identifying priorities within the human resources department
- iv. implementing knowledge management support system within the human resources department
- v. managing the expectation of employees

(Soliman *et al*, 1999)

Clarke and Staunton (1989) outlined model of knowledge management process that can be used in mapping human resources knowledge (figure 3). The model integrates four concepts; construction, embodiment, dissemination and use of knowledge. These concepts are blended together to ensure the successful of KM Human resource strategy.

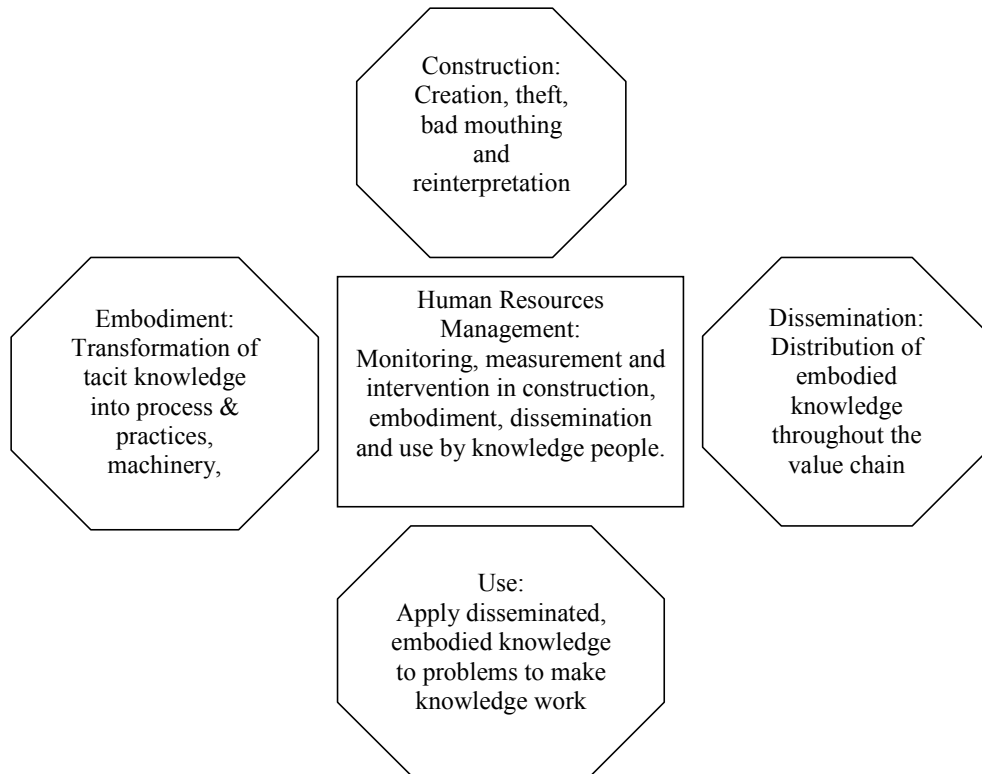


Figure 3: Model of Human Resource Management in Knowledge Management Strategy (Adapted from Clark and Staunton, 1989)

### Knowledge Management System

Knowledge systems have evolved from knowledge-based systems, which were developed using knowledge engineering techniques. For Schreiber et al (1999), knowledge systems are the tools for managing knowledge, helping organizations in decision problem-solving activities and facilitating the making of decisions. Such systems have been used in the areas of medicine, engineering, product design, finance, construction and so on (Hendriks and Virens, 1999, Davenport and Prusak, 2000, Chau et al. 2002, Tiwana and Ramesh 2002). This system encompasses methods and techniques for knowledge acquisition, modelling, representation and use of knowledge. Modelling techniques is recently used in developing a knowledge management system. Models are used to capture the



essential features of real systems by breaking them down into more manageable parts that are easy to understand and to manipulate. A model is a simplification of reality. Real systems are large entities consisting of interrelated components working together in a complex manner and help people to appreciate and understand such complexity by enabling them to look at each particular area of the system in turn. It will draw the blueprints of the system and to facilitate communication between different people in the team at different levels of abstraction. People have different views of the system and models can help them understand these views in a unified manner. The modelling process constructs conceptual models of knowledge-intensive activities (Schreiber et al. 1999). Tiwana (2000) had come out with knowledge management system that real estate business can use to implement the above model into the system approach. It consists of 5 layers which are as follows:

- i. Interface layer-connects to the people who use this IT infrastructure to create, explicate, use, retrieve and share knowledge.
- ii. The access and authentication layer-security and restricted access for the remaining layers are maintained at this level. This is to penetrate of intranets into many companies and vulnerability thus arising.
- iii. The collaborative filtering and intelligence layer-constitutes intelligence within knowledge management systems. It will add tags and Meta tags to knowledge elements (units of actionable information).
- iv. The application layer-application such as skills directories, yellow pages, collaborative tools, video conferencing software and hardware, and conventional decision support tools are placed at this level.
- v. The transport layer-this layer consist network such as TCP/IP, web server, A POP 3/SMTP or mail server, virtual private network and streaming audio and video on the central server.

## **KM STRATEGIES ACTIVITIES**

From the conceptual model above (figure 2), this paper will explore the activities that might be happened in property management organisation. These activities extract from various literature that will in turn need to be tested empirically to research subject. The activities are outline as in table 1.

Table 1: KM Strategies Activity

No.	KM Strategy	KM Activities
1	KM Organisation Strategy	Organisation encourages the practice of understanding, documenting, archiving customer requirement.
2		Organisation encourages staff to transfer their working knowledge/ knowledge to new and inexperienced staff.
3		Organisation encourages knowledge sharing among staff that attended training, CPD, conferences and seminar.
4		Brainstorming, team work, work in pairs are well accepted and recognized among staff
5		All responses from customer will be in close attention and dealt prior to the next testing.
6		Customer's queries will be dealt with in prompt manner
7		Organisations provide incentives and acknowledgement to the staff for innovations, new ideas and sharing of experiences.
8		Development of policy and program to boost loyalty and to reduce staff turnover rate.
9		Staff assessments are based on their individual contribution to the knowledge development in organisation.
10		A special task unit being formed to manage knowledge within the organisation.
11		A special task unit being formed to manage knowledge within the organisation
1	KM Technology Strategy	<b>Sharing Knowledge/Information</b>
2		Online Messaging
3		Telephone
4		Video Conferencing
5		Document Management System
6		E-forum
7		E-mail
8		Blogs

		<b>Technical Appliances</b>
1		Website
2		Wireless Internet Connection
3		Wired Internet Connection
4		Mobile Technology
5		Internet
		<b>Information Dissemination</b>
1		E-mail
2		Memo/letters
3		Bulletin Board
4		Website
5		Fax
		<b>Assisting Tools for Recording, Controlling and Tracking</b>
1		Microsoft Project
2		Spreadsheet
3		Physical Document
4		Facilities Management Software
5		Property Management Software
1	KM Culture Strategy	Sharing information together
2		Working closely with others
3		Team oriented work
4		Trust
5		Fairness
6		Enthusiasm for the job
7		Autonomy
8		Flexibility
9		Supportive of Employees
10		Tolerance of Failure
11		Rule Orientation
12		Praised good performance

13		Experimentation
14		Demanding of Employees
15		Take Advantage of Opportunities
16		Having a Good Reputation
17		Being Exact
18		Decisiveness
19		Problem Solving
20		Adaptability
21		Developing Friends at Work
22		Being Thoughtful
23		Security of Employment
1	KM Human Resource Strategy	Staff taking own initiatives to independently upgrade their competency and skills.
2		Staff encouraged by the organisation to continue their professional course/education.
3		Peers provide informal training related to knowledge management within the organisation.
4		Staffs capture and use knowledge obtained from other industry sources.
5		Staffs capture and use knowledge obtained from other public research institutions and universities.
6		Staffs use formal mentoring practice including apprenticeship.
7		Staff regularly updating databases of good work practices, lesson learnt, or listing of experts.
8		Staffs feel elated by incentive and rewards schemes provided by the organisation.
9		Staff plans their projects and progress monitoring systematically for self efficient recording.
10		Staffs have awareness of sharing knowledge among peers as well as within the real estate fraternity.

## CONCLUSION

Knowledge management strategy is a way to make property management companies enhance their productivity of business as well as sustainable competitiveness. This study only touches on conceptual KM Strategy to implement knowledge management by drafting knowledge management strategy. However, this model needs to be tested for further research. It will be based on the conceptual model design based on cultural environment, knowledge area, and knowledge asset, and technology, critical performance, integrating resource knowledge, process orientation and knowledge management system. This paper aims to identify a conceptual model based on various literature and model design by other researchers in other areas. The conceptual model of KM is basically the same; nevertheless it has to be suited to real estate business. The process of developing the key strategies is important hence encouraging understanding among real estate professionals. Thus, it will create an environment in appreciation of the most important asset in company's knowledge.

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