Abstract
This paper tries to suggest the implementation of knowledge management strategy for property management business in Malaysia. The strategy which is a conceptual model for this research work, formulated from various literature surveys. This will then be a conceptual model for this study. The study is based on conceptual design framework on knowledge management approach for property management companies. Case study is among registered property companies with Board of Valuers, Estate Agents and Appraisers. This is to determine the level of implementation for knowledge management strategy of the identified property management companies. Knowledge Management is relatively a new terminology for property management industry in Malaysia. However, some of the elements are in place. Thus, this model will be tested to distinguish the level of implementation. And it will then to be as a base of knowledge management system for property management industry in Malaysia. This study will give significant contribution to the property management industry in Malaysia. As business environment is evolve which knowledge is vital, property managers should participate in globalisation changes. This concept will in turn revolutionise organisation into more innovative and competitive companies.

Keywords: Knowledge management strategy; Property management; Malaysia.

JEL Classification Codes: Q2; Q23.

1. Introduction
In property management industry, the concept of knowledge management (KM) is relatively new. The concept of knowledge management (KM) is relatively new in property management industry. From the literature survey, very few studies focus on the concept of knowledge management in property management. However, literature exists in other subject areas particularly in relation to the concept of local knowledge that provides debate and useful insight on how knowledge is acquired by and transferred between individuals (Almond, 2001). Thus, this paper the level of implementation of knowledge management strategy among property management companies in Malaysia. Results from this research works are to some extent will be as a based for the whole KM framework.

The property management industry has also seen innovative change in recent years, not least caused by the advent of the internet and the evolution of new routes to market (Wynn et al., 2007). Dixon (2005) highlighted that there was an increasing debate during the late 1990s over the emergence of a ‘new economy’, built on major structural changes driven by globalisation and information and communication technology. He further stated that the trend was shifting 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). Furthermore, real estate professionals should re-orientate themselves in a globalise world. In management playing field, knowledge management is already become common term for organisation turn into better organisation as well as develop managerial skills among workers. Knowledge management represents a logical progression beyond information management (Baker and Badamshina, 2002). Furthermore, knowledge management can also be seen as representing a culmination and integration of many earlier organisation development...
ideas such as total quality, reengineering, organisational learning, benchmarking, competitive intelligence, innovation, organisational agility, asset management, supply chain management, change management, etc. (Baker and Badamshina, 2002).

According to Shawn Callahan (2003), knowledge management strategy should encompass:

i. actions that are intended to result in anticipated business outcomes;
ii. actions that emerge as a result of the many complex activities that are undertaken within an organisation.

Lam (2008) highlighted, from the strategic management point of view, managers should always review the environmental changes and seizes opportunities to improve their organisational performance. In the information age, many organisations compete for shrinking profit margin in increasingly global market (Aurum et al., 2007). Malmberg et al (1996) bring to light three key issues in order to ensure competitiveness in firms:

i. localised innovation processed
ii. barriers to the diffusion of knowledge
iii. attraction of outsider sources of knowledge

2. Knowledge Management in Property Management Organisation

According to Gibson and Hedley (1999), information is critical to the management process. They added, the core activities and responsibilities of any corporate property manager rely on having good quality, accessible and accurate information. Matzdorf et.al (2000) strengthens this statement and come out with study pertaining on barriers to organisational learning in the chartered surveying programme. One of the main targets in knowledge management concept is to create learning organisation. The study reveals that the main obstacles were:

iv. emphasis on individual learning;
v. learning-equals-training;
vi. learning-equals-lack-of-knowledge attitude;
vii. a not precisely defined but all-pervading notion of professionalism competition;
viii. the complex-or even contradictory-nature of the professional bodies;
ix. those ‘unwritten rules’ within the profession that work against organisational learning;
x. the traditional hierarchical structure within the profession and in surveying firms;
xii. learning as a cost factor rather than an investment; and

From the aspect of dissemination of knowledge, Almond (2001) emphasises on the important among surveyors to have well verse in local market condition. His study focuses on how knowledge is disseminated and the issues impact on practice. The study stresses on strategic knowledge is universally applied; for example, knowing that horizontal cracking at half-metre intervals is a sign of cavity wall tie failure, or knowledge of particular property types. Thus, property manager should be very sensitive to the changes in the economic environment so that contingency plans can be made for the owners in terms of cash flow planning (Li, 1997). Property managers must also view property in various ways. According to Gibson (1994), property to property managers is a technical challenge. They only focus on the building and not the activity which takes place inside. She added property to them is building which needs to be renewed, accommodation which needs to be refurbished, and a tax liability which needs to be minimised. Thus Gibson (1994) drafted strategy framework for property management which emphasised operational property is managed on a par with all other significant resources and property should be part of an organisation’s strategic planning process. In another word, property managers should integrate operational objective combined with all information on property, operational and external. At the same time property managers should give notice on how to achieve (activities, skills requires and responsibilities) and how to monitor (property and management). After these activities working in tandem, as a result, the property objective will be achieved (figure 1).
Chin (1999) surveyed on Singapore’s property management industry. From his survey, it is revealed that clients are more demanding and are taking into consideration whether a company has an ISO certificate. He added, as the business environment becomes increasingly competitive, many Singapore companies have to look beyond their shore for opportunities. While Li (1997) found that there are many problems for the implementation of good property management in this emerging property market. He also stressed this is especially the case when the supply of good quality buildings is increasing in various cities, and competition among cities and buildings will soon be very keen. Users have a very different view of property from that of the property managers (Gibson, 1994). Property managers can be equally blinkered. Property to them is a technical challenge. They focus on the building and not the activity which takes place inside (Gibson, 1994). Li (1997) found out that in China, two major obstacles in developing good management practice in China’s market; training and staffing. Furthermore, Dixon et al., (2005) highlighted that real estate business is now shifted to the new types of real estate. He mentioned the importance of property managers need to aware on issues related to the emerging of ICT. The issue that needs to be responsive on property management are as follows:

i. leasing space but installing dedicated equipment
ii. outsourcing facilities management where the server is maintained by solo management and the customer is responsible for application programs
iii. renting applications programs from an application service provider associated with systems integration and other customised software (amended from Dixon et al, 2005)

Furthermore Kishk et al., (2004) indicates that in property management, performance measurement is essential due to the development of property management corresponds with the growth of cities. Thus, he added, with the unpredictability of future demand, there will be an increased recognition of property as an asset by both individuals and organisations. In their research, it revealed that there is a seeming lack of structured processes for carrying out the performance measurement of properties. In Chin and Poh (1999) research, performance indicators based on these measures;

i. Number of maintenance contracts renewed.
At the end of the usual three year maintenance contract (in case of Singapore), the client assesses the individual property manager’s performance. In this way, the number of maintenance contracts secured and renewed will reflect the performance and success of the property management units.
ii. Number of successful tenders
The professionals fees in each management contract are charged on a per unit per month basis. If clients are prepared to accept the higher fees in each management contract are charge on a per unit management, it would reflect the client’s confidence in the company and the level of service that it provides.

iii. Number of breakdowns and complaints
A decrease in the number of residents’ complaints received and breakdown recorded would indicate a higher quality of professional service performed. (Chin and Poh, 1999)

Based on study above, Tas et al., (1996) formulated five areas relating to property manager to sustain their competency which are follows:

i. Conceptual- creative (the cognitive skills need for the job)
ii. Leadership (the ability to turn ideas into productive action)
iii. Interpersonal (skills for effective interaction with others)
iv. Administrative (personnel and financial management of the business)
v. Technical (the knowledge and skills essential to producing the product or service)

Gibson and Hedley (1999) summarise all the essential elements that property managers need to do from a range of both operational and strategic level of management functions;

i. undertaking day to day activities
ii. planning and making decisions about future activities
iii. tracking progress and evaluation performance

Lam (2008) pointed out that from the strategic management point of view, managers should always review the environmental changes and seize opportunities to improve their organisational performance in particular the changes in market competition and customer expectations. In her study, she revealed that professional housing services have become common strategic choices. This new term in property management needs to be aware among property managers in Malaysia. In knowledge management, updating current knowledge is one of the main activities.

Innovation is vital element in organisation. To ensure successful in organisation, the element of innovation needs to be taken into account in strategic planning. One of the important strategies in knowledge management is innovation activity. UK government had come out with Knowledge Transfer Partnership (KTP) scheme to accelerate innovation activity in UK industry (Wynn et al.,2008). The scheme is working closely with university as a part of the programme. The scheme has consistently delivered major business benefits for companies with local universities across the UK (Wynn et al., 2008). Cheong (2005) had developed competence model for professional real estate services (figure 2). In this model, obviously one of the major components is knowledge.
From the review of literature above it is unambiguous it is a significant for property management companies to have essential knowledge on the property. This research focuses on property management companies in Malaysia which are closely related to the business world. Obviously, the main target in the business world is to gain more profit. The way to get more profit depends on various organisation activities. The most important element in any organisation is management activities. Knowledge management, being one of the disciplines in an organisation, has progressively become more important. In this research, there are four areas that need to be focused to develop KM strategies in an organisation based on frameworks developed by several authors (table 1).

3. The KM Framework for Property Management

Until the recent years, there has been relatively little effort to formulate knowledge management strategy in the property management practice. Nonetheless, this paper identifies the gap by over viewing all models relevant to be suited into property management that are appropriate for the property management practices. Base on KM framework from the literature review were assessed and examined the potential to be implement in property management. Evidence from the literature surveys were assessed and examined to seek guidelines for the development of the potential KM strategy to be implemented in property management practice. Several KM strategy models were use to ascertain hypothetical background to investigate the KM strategy in property management companies. Though, it is vital to know the background of property management companies.

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 as tools aiming to provide a framework for anticipating the unknown. While Rubenstein et al. (2001), defined knowledge management as a conceptual framework for problem-solving that considers problems in their entirely. In addition, knowledge management can be viewed as a conceptually complex, evolving, broad umbrella of issues and viewpoints (Smith, 2004).

Nonaka and Takeuchi (1995) differentiated knowledge management model into 4 models which are as follows (see figure 3):

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 3: Four modes of knowledge conversion (Source: Nonaka and Takeuchi, 1995)

After examining all relevant KM models, this paper accentuates on four major elements in KM to investigate KM strategy implementation in property management. In this paper, the findings are based on strategy below;

SI 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. Thus ten items have been identified which are as follows:

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO1</td>
<td>Organisation encourages the practice of understanding, documenting, archiving customer requirement.</td>
</tr>
<tr>
<td>KMO2</td>
<td>Organisation encourages staff to transfer their working knowledge/knowledge to new and inexperienced staff.</td>
</tr>
</tbody>
</table>
KMO3 Organisation encourages knowledge sharing among staff that attended training, CPD, conferences and seminar.

KMO4 Brainstorming, team work, work in pairs are well accepted and recognized among staff.

KMO5 All responses from customer will be in close attention and dealt prior to the next testing.

KMO6 Customer’s queries will be dealt with in prompt manner.

KMO7 Organisations provide incentives and acknowledgement to the staff for innovations, new ideas and sharing of experiences.

KMO8 Development of policy and program to boost loyalty and to reduce staff turnover rate.

KMO9 Staff assessments are based on their individual contribution to the knowledge development in organisation.

KMO10 A special task unit being formed to manage knowledge within the organisation.

KMO11 A special task unit being formed to manage knowledge within the organisation.

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.

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Item Description</th>
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<tbody>
<tr>
<td>KT0</td>
<td>Sharing Knowledge/Information</td>
</tr>
<tr>
<td>KT0-1</td>
<td>Online Messaging</td>
</tr>
<tr>
<td>KT0-2</td>
<td>Telephone</td>
</tr>
<tr>
<td>KT0-3</td>
<td>Video Conferencing</td>
</tr>
<tr>
<td>KT0-4</td>
<td>Document Management System</td>
</tr>
<tr>
<td>KT0-5</td>
<td>E-forum</td>
</tr>
<tr>
<td>KT0-6</td>
<td>E-mail</td>
</tr>
<tr>
<td>KT0-7</td>
<td>Blogs</td>
</tr>
<tr>
<td>KT1</td>
<td>Technical Appliances</td>
</tr>
<tr>
<td>KT1-1</td>
<td>Website</td>
</tr>
<tr>
<td>KT1-2</td>
<td>Wireless Internet Connection</td>
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<tr>
<td>KT1-3</td>
<td>Wired Internet Connection</td>
</tr>
<tr>
<td>KT1-4</td>
<td>Mobile Technology</td>
</tr>
<tr>
<td>KT1-5</td>
<td>Internet</td>
</tr>
<tr>
<td>KT2</td>
<td>Information Dissemination</td>
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</table>
**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;

- a long term vision and advance management of the change
- communication and dialogue
- trust and respect for all individuals
- teamwork
- empowerment
- ambiguity tolerance
- risk assumption
- 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. 23 items have been identifies under KM Culture activities as a variables that were test among property management companies.

<table>
<thead>
<tr>
<th>KM Culture Activities (KMC)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMC1</td>
<td>Sharing information together</td>
</tr>
<tr>
<td>KMC2</td>
<td>Working closely with others</td>
</tr>
<tr>
<td>KMC3</td>
<td>Team oriented work</td>
</tr>
<tr>
<td>KMC4</td>
<td>Trust</td>
</tr>
<tr>
<td>KMC5</td>
<td>Fairness</td>
</tr>
<tr>
<td>KMC6</td>
<td>Enthusiasm for the job</td>
</tr>
<tr>
<td>KMC7</td>
<td>Autonomy</td>
</tr>
<tr>
<td>KMC8</td>
<td>Flexibility</td>
</tr>
<tr>
<td>KMC9</td>
<td>Supportive of Employees</td>
</tr>
<tr>
<td>KMC10</td>
<td>Tolerance of Failure</td>
</tr>
<tr>
<td>KMC11</td>
<td>Rule Orientation</td>
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<table>
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<tr>
<th>KMC 12</th>
<th>Praised good performance</th>
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<tbody>
<tr>
<td>KMC 13</td>
<td>Experimentation</td>
</tr>
<tr>
<td>KMC 14</td>
<td>Demanding of Employees</td>
</tr>
<tr>
<td>KMC 15</td>
<td>Take Advantage of Opportunities</td>
</tr>
<tr>
<td>KMC 16</td>
<td>Having a Good Reputation</td>
</tr>
<tr>
<td>KMC 17</td>
<td>Being Exact</td>
</tr>
<tr>
<td>KMC 18</td>
<td>Decisiveness</td>
</tr>
<tr>
<td>KMC 19</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>KMC 20</td>
<td>Adaptability</td>
</tr>
<tr>
<td>KMC 21</td>
<td>Developing Friends at Work</td>
</tr>
<tr>
<td>KMC 22</td>
<td>Being Thoughtful</td>
</tr>
<tr>
<td>KM 23</td>
<td>Security of Employment</td>
</tr>
</tbody>
</table>

**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.

1. attitudes of worker towards knowledge-sharing activities
2. extent to which workers actively participate in KM and knowledge sharing activities
3. 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:

1. reviewing the drivers and strategies for human resources knowledge management efforts
2. gaining the commitment and understanding from human resources executives
3. identifying priorities within the human resources department
4. implementing knowledge management support system within the human resources department
5. 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 4). 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.
10 variables have been drafted out in order to accomplish KM strategy investigation on property management (table 4). These variables were tested for property management companies.

**Table 4: KM Human Resources Strategy**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMHR1</td>
<td>Staff taking own initiatives to independently upgrade their competency and skills.</td>
</tr>
<tr>
<td>KMHR2</td>
<td>Staff encouraged by the organisation to continue their professional course/education.</td>
</tr>
<tr>
<td>KMHR3</td>
<td>Peers provide informal training related to knowledge management within the organisation.</td>
</tr>
<tr>
<td>KMHR4</td>
<td>Staffs capture and use knowledge obtained from other industry sources.</td>
</tr>
<tr>
<td>KMHR5</td>
<td>Staffs capture and use knowledge obtained from other public research institutions and universities.</td>
</tr>
<tr>
<td>KMHR6</td>
<td>Staffs use formal mentoring practice including apprenticeship.</td>
</tr>
<tr>
<td>KMHR7</td>
<td>Staff regularly updating databases of good work practices, lesson learnt, or listing of experts.</td>
</tr>
<tr>
<td>KMHR8</td>
<td>Staffs feel elated by incentive and rewards schemes provided by the organisation.</td>
</tr>
<tr>
<td>KMHR9</td>
<td>Staff plans their projects and progress monitoring systematically for self efficient recording.</td>
</tr>
<tr>
<td>KMHR10</td>
<td>Staffs have awareness of sharing knowledge among peers as well as within the real estate fraternity.</td>
</tr>
</tbody>
</table>

From the above literature, the conceptual model that is being tested to property management companies is drawn up. The four elements are based on five key areas are adopted and form a basic of the formulation of the KM strategy model. All these elements form one main pillar which is called as an integrated resources knowledge concept (Figure 5).
4. Conclusion
This paper tries to explore the possibilities to develop the KM strategy conceptual model on property management companies in Malaysia. In doing so, the KM strategies which were formulated as a conceptual model is applied for examining 25 registered property management companies. The conceptual framework of KM strategies was developed to catalogue the multiplicity in KM activities. This study only touches on conceptual method to implement knowledge management by drafting knowledge management strategy. However, some pilot study needs to be done for further research. It will be base up 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. The aim is to identify a conceptual model based on various literature and model design by other researchers in other area. This model needs to be tested among the property management companies in order to analyse the significant of KM strategy models in these particular of business.

References


