Knowledge Management of real estate firms in China and Sweden

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Abstract:
Company knowledge is well recognized as a significant asset in many countries all over the world. The company’s business achievement and outcome are influenced by the expertise of the staff, especially in the real estate industry. Utilizing the best practices of company knowledge and managing the knowledge well can help the real estate firms to improve the business performance through the increasing productivity and efficiency. However, there is also exist differences in the knowledge management between Sweden and China which can be presented by two cases study.

Purpose — this paper attempts to develop a knowledge management framework which can be applied to Swedish and Chinese real estate firms according to study and summarize existing theories.

Method—the strategy, which takes the conceptual model, is new research result from various literature surveys on knowledge management. The case study includes 57 Swedish real estate firms and 50 Chinese real estate firms. Empirical validation was done to propose the KM strategies model in the context of property management.

Findings and conclusions— with statistical analysis, several magnitudes were identified as the key strategies of KM in the property management companies.
However, the companies should take measures to overcome the barriers which may damage the knowledge system.

Key words: knowledge management, real estate, strategy
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Youjia Shi
July, 2012, Stockholm
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1. Introduction

Knowledge Management (KM) is an essential topic in management theory which plays a key role in management level of real estate firms. It has been applied broadly in many fields, such as human resource management, IT engineering, business administration, and science and medicine industry.

As the property industry contributes significantly to the economic growth and development in Sweden and China, especially in China, these property companies need to ensure that the KM in real estate is well-structured. What’s more, it is believed that my theory research results about KM can assist property management class to perform their role more effectively and positively impact the property industry. To struggle on best practice and results of knowledge management, we should firstly learn it well and utilize it properly.

However, very few research studies have been carried on knowledge management in real estate industry.

1.1. Background

The real estate industry distinguishes itself from other industries by owning a slower rate of information technology industry development, also with a lower productivity in Sweden (Build commission 2002). Although the construction rate in China could be faster and the productivity is stronger than those in Sweden, it still needs a lasting time to finish the whole project, the production period is quite long comparing with other industries. On the other hand, personnel are always faced with various challenges and critical problems, the problems are caused by the nature character of real estate industry and cannot be solved manually and easily.

At this moment, with the desired property quality, the knowledge management can be considered very importantly to improve the construction productivity. This can be referred from the manufacturing industry, especially from the specific case—Scandia, Swedish truck manufacturer top firm. Scandia has successfully developed its own production system, Scandia Production System (SPS). The employees carried out the system with their valuable knowledge and
experiences in order to improve the productivity performance. Scandia provides enough space and freedom for employees that encourage them to engage in continuous improvements in the production system. Loforte Ribeiro (2009) relates that the competitiveness of a firm is directly correspondent to its ability to create and share, knowledge, particularly the knowledge of its most valuable asset; the leading role is the employees.

The customer orientation is an important part of a customer’s overall satisfaction assessment, also for the real estate industry. My survey research also concerns the customer services skill of the real estate industry knowledge and explores the importance for the management people to own the customer services skills in the real estate firms. The implications for the real estate industry can be found in the theory research section.

1.2. Purpose of the study

The overall purpose of this study is to develop a suitable best framework of knowledge management advices model for the real estate firms in Sweden and China.

Research questions

In order to successfully address the purpose, the following research questions will assist the thesis work:

a) How does the knowledge management process work in real estate firms?

b) What barriers does the knowledge management meet in the real estate firms?

c) What is the knowledge management strategies for the top management people of real estate industry usually use in dealing with specific issues?

d) Which kind of model is available for the management class in the process of knowledge management?

The proper answers have been generated in the part of conclusion.
1.3. Thesis disposition

The thesis can be divided into six chapters which together constitute my framework of knowledge management, including the KM and KM strategy, KM process and objective, cases of KM in real estate firms of China and Sweden, driving forces of KM process and the conclusion part.

1.4. Limitations

As stated in the purpose, the thesis aims to provide theory support about the knowledge management for Swedish and Chinese real estate companies. It could not establish a full scale KM framework for all of the divisions in the real estate company. Unfortunately, I did not get the chance to do face to face interviews with the management people in Swedish and Chinese property companies which may lead to lack of practical application problem, I just use Skype and telephone to attend some distant-meeting on line, not a real interview. The critical methodology is the online survey which obtains 57 Swedish and 50 Chinese feedbacks. The number of feedback also has the limitation and the results may do not have the ability to present all of the property companies within entire industry.

2. Methodology

A literature review was adopted to summarize the secondary resources and tremendous data to offer a distinct structure of Knowledge Management system and abundant content of KM concept.

As a whole, this paper is based on previous studies about the general knowledge management concept and it comes up with new findings about the KM theory in real estate industry with the practical cases in Swedish and Chinese real estate firms, including the valuation and surveying firms, property consultancy firms collected together in the registered list.

Regarding with the geographical long distance, it was employed by a mixture of distribution
approaches and mail delivered questionnaires.

The first methodology in this survey was based on content and quality analysis which analyzed each company’s annual report. I searched some Chinese real estate companies who did a good job in the field of knowledge management and took some Skype meeting by phone or online. There were no same practical things conducted in Swedish real estate firms unfortunately. The annual report of Vanke in 2009 has been attached in the appendices.

A questionnaire was used to identify the utility of KM strategy in real estate companies. The questionnaire whose name is “Knowledge Management in Real Estate Firms” was sent to 100 Swedish property firms and 100 Chinese property firms, however, there were 60 Swedish companies and 55 Chinese companies willing to participate in this research. These companies represent 60% of the total number of registered property management companies in Sweden and 55% in China. All levels of management within the targeted organizations participated in this survey including the high level managers, middle managers and lower level managers.

This method yields better results as it covers all levels from many functional areas apart from being able to avoid common, typical responses in viewpoints. Asking the same questions to all levels of management would also get a similar database and perspective in their responses for each of the KM strategies. Semi-structured questionnaires were carried out to disseminate the questionnaire and to decide the number of property managed by the companies. Refer to the questionnaire part, the respondents were asked on the level of implementation of these KM strategies as these KM elements were considered to be very important from the previous questionnaire. With the scale from 1 to 5 which represents not implemented and extensively implemented, and then with the descriptive analysis such as frequency and mean, the level of KM implementation based on the 8 elements mentioned.
3. Research and theory work

3.1. KM definition

3.1.1.1. Knowledge Management definition

Based on the notion of what the knowledge is, knowledge management can be identified as the processes and tools that allow a company to efficiently capture, maintain, and utilize its information. It firstly established as a specific area of management science in the early 1990s (Prusak, 2001). People make use of the human resources management, artificial intelligence systems, software engineering, business process and corporate behaviors and abstract “knowledge management” from these areas.

We cannot find a consistent definition and description about what the Knowledge Management is. Different experts give different opinions about the KM. I collect some of definitions from a lot of literatures:

Professor Delphi said that KM is a tool set for the automation of deductive or inherent relationships between information objects, corporate users and business processes.¹

“KM caters to the critical issues of organizational adoption, survival and competence in face of increasingly discontinuous environmental change. Essentially, it embodies organization processes that seek synergies in the combination of data and information processing capacity of information technologies, with the creative and innovative capacity of human beings.” According to Youjia (2012).

“KM is an integrated systematic approach to identifying, managing and sharing all of an enterprise’s information assets, including databases, documents, policies and procedures, as well as previously unarticulated expertise and experience resident in individual workers.”

“KM aims to achieve fast and easy access to all types of information and emphasizes interpersonal communication rather than the mere capture and storage of knowledge.”

Anuar grouped KM into two types, one is tacit knowledge and the other is codified knowledge. Tacit knowledge is usually unwritten and specified in individual. It is collected through education, training and general working experience. On the other hand, codified knowledge is more easily

¹ Source: http://www.mit.edu
distributed and transferred (ISIS, 2002). Also, codified knowledge is also termed as explicit knowledge (Kermally, 2002).

KM owns three basic elements that are people, technology and the process (UNFPA, 2002; 2003). Based on the distinct characteristics of the professional people, the progressive implementation of information technology in real estate firms, it is essential to explain the heterogeneity of the processes of knowledge management.

The definition of KM also builds three different entities, according to the interaction inside, in order to create new, knowledge-based, value added. Of course, we should realize that the innovation depends on the cost effectiveness and widespread capability of interaction among the three factors.

Yasmin believes that a company significantly decreases time lost on the dreaded “reinvention of the wheel” in order to organize the information and keep it current. Companies are now viewed as bodies of knowledge thus creating a new perspective on companies (Nahapiet & Choshal, 1998). People realize that the economic prosperity of an organization depends on the effective exploitation and retention of this organizational knowledge.

3.1.2. KM general definition in real estate firms

As we all know, knowledge is the information residents in people’s minds already that is utilized for realizing the unknown things in the world. The knowledge should be in the mind of people and then could be produced and applied by the knowledge worker. That is to say, knowledge must be placed in a specific condition on which an action or a decision can be made as imagined.

The knowledge management is the set of proactive activities to support the real estate companies in creating, assimilating, disseminating, and applying the property knowledge in real estate industry. Knowledge management is a continuous process to understand the property knowledge needs, the location of knowledge and how to share, improve and create new real estate knowledge.
3.2. Resources and support of KM functions

There are at least five main categories in the functions of Knowledge Management:

- **Externalization**: It refers to the delivery of knowledge from the mind holders into an external think tank. Sharing knowledge works in this delivery process. It is a good tool for the company to track the related data about the business competitors.

- **Internalization**: It is the process of knowledge withdraw from the exist think tank, and also helps the seeker to find the evidence of knowledge. This function involves the explanation of the knowledge performance with the inner reasons. People can also build yellow pages to category the skills and experiences in order to make this function show perfectly, also in the way to archive the best practices.

- **Intermediation**: It directs to the transfer process between knowledge owner and knowledge seeker. It performs as a “match maker” with the outstanding resource, serving for the knowledge seeker.

- **Cognition**: This function helps individuals make decisions according to the exist useful knowledge. It is applied for the exchange knowledge leading the top three functions.

- **Measurement**: It shows all of the KM activities, including the performance of KM related solutions. This function aims to provide strong support for the above four functions, instead of managing itself.

The macro KM functions also contain many atomic functions, which are the followings:

- Identifying the authentic information in all areas;
- Adding value to the information to generate new knowledge;
- Learning and understanding;
- Expanding the scope of the new knowledge which could distinguish the relationships among elements and information shared;
- Constructing enough technical infrastructures;
- Making available process of sharing the knowledge resources and transfer the explicit information;
- Changing the individual knowledge into sharing the knowledge among the organizations or companies;
3.3. KM strategy

3.3.1. KM general strategy

Shawn Callahan (2003) pointed out that KM strategy should include the following formulations:
Actions that are intended to result in anticipated business outcomes;
Actions that emerge as a result of the many complex activities that are undertaken within an organization.

As people all know the KM strategy plays a significant role in company management especially in this information age, Malmberg et al (1996) bring to express three main issues in order to ensure the ability in companies:
A. localized innovation processed;
B. barriers to the diffusion of knowledge;
C. attraction of outsider sources of knowledge.

3.3.1.1. Analysis of KM strategy characteristics

The KM strategy characteristics could be operated leading to success in the organizations, especially in the real estate companies, but it still need a lot of initiatives to motivate, which are:

- Scrutiny the targets of the KM programs, covering all of the details, like internal and external factors etc.;
- Endeavour the support from the top management class, especially when the program has the attention by the CEO, the overall operation can be undertaken successfully;
- Make sure to break the Strange Circle of storing information, which is resulted from the absence of essential tools and awareness. Of course, there is no way to convince the employees to gain the ownership of all of the information without proper incentives. Hence, the management class will be needed to certify the knowledge holders to share good advices with their colleagues.
- Set up a long run business goal as the core point of company. People should know that the KM investment is not for short run financial investment.
- Offer the proper flexibility and customize the KM product, matching with the ability and
product time line, this will improve the growth rate and motivate the employees to work with high spirit.

- Insure that the technology function point is a facilitator, rather than a replacement for intelligence and human expertise.
- Regarding the user base, the company should provide a well-structured knowledge for the seekers, even if the seekers are not on the same level with the sharing people.

### 3.4. Diversified KM strategy models research

Developing a knowledge management strategy provides a very unique opportunity to gain a greater understanding of the way the company operates, and the challenges that confront it.

![Diagram of Knowledge Management Strategy](image)

**Figure 1:** Developing a knowledge management strategy

How to develop a Knowledge Management Strategy

There are available methods to develop a knowledge Management strategy, which provide support for the model of KM process.

**Top-down**

The orientation of knowledge management strategy is focus on the innovation of KM which can influence the goals of the company activities.

**Bottom-up**

The critical research is carried on the core employees’ knowledge experience seminars in which the management people can gain essential knowledge management strategy concepts, it is a little bit like brain storm meeting and summarize the knowledge collision results.

Based on the two main approaches, a knowledge management model comes up with the KM needs analysis among staff. The model can be described as the followings:

1. The first step is to recognize the important employees in the company who play a key role in the decision-making process and influence other people process.

2. Secondly, we should carry out the essential measures to investigate and analyze why they often participate in critical activities and summarize the main characteristics of their behaviors. Furthermore, we can distinguish the important needs and issues of the critical staff.

3. Based on the results of analysis among the key staff in the research, we should determine the core direction of knowledge management, also with the knowledge management strategy.

4. Use the brain storm or more rational methods to come up with the conclusive approach for the knowledge management process.

5. Adopt the method of drawing on the wisdom of masses in the company and try to find more ways to implement the existing approaches for the knowledge management.

Broadly speaking, the top-down method is much more popular and people tend to would like to adopt it and focus on it. But people can find that it is not easy to change the inherent ideas and concepts of key staff during the knowledge management process, even they accept the required company culture. Hence, the orientation of KM needs a long time to impact the management people with great efforts, even with main decision-making activities.
No matter how perfect your KM approach and strategy model is, it is important to identify the basic of the KM process, that is recognizing the key staff; people is the core factor for each step during the process. Generally speaking, the key staff can be considered as the front-line employees, instead of the managers or the administrative staff. But this is not fit for every condition; it should depend on the nature, the structure of the company, the type of industry and other alternatives. The common staff groups can be divided into 9 departments: front-line staff, call center staff, field workers, IT staff, managers (senior, line), administrative and related support staff, researchers, production workers, clinical employees. Each group has their own unique characteristics and the KM strategy should be developed respectively in order to match different needs of them.

Talking with the key staff is always considered as a critical step for the knowledge management process, because the meeting can enlighten people to learn more things about the knowledge and experience.

On one side, the talking process is very easy, and it has the ability to implement and ensure the survey findings and recommendations are well understood in the internal of company. On the other hand, the talking process can be very efficient not only for the first round business profit of the specific projects, but also with the additional targeted research for the business improvements.

3.5. KM strategy in real estate companies

The real estate firms could achieve success with the following characteristics in the field of knowledge management which also bring great benefits on the real estate industry:

- Distinguish the functionality and features of KM products clearly;
- Be apprehensive of company goals and significant achievement items to carry out a KM related program;
- Get through to the goal of technology which can be implemented to a KM related program.

1. The technology is used in the companies commonly, such as the intranet forum, emails, message, telephone calls, portals, and the directory of expertise, internal board and newsletter. The management people encompass strategies likes using website, wireless internet connection
and bulletin board internally.

2. The attitude among the workers is also very critical for the management to control. The management should deliver clear task to employees and provide related work support.

![Property management strategic Framework (Gibson, 1994)]

Figure 2: Property management strategic Framework (Gibson, 1994)

4. KM processes and objective

4.1. KM general processes

Knowledge management depends on both the cultural and technological processes of creation, storage, sharing and transfer.
4.2. KM processes in real estate firms

4.2.1. The goal of KM

The goal of knowledge management is to manage the knowledge which is mostly important to the companies. The KM efficiencies only occur when the right knowledge goes to the right person at the right time.

Bell (2001) indicated that KM is decisive because it shows the way to comprehensive and expressly understandable management initiatives and procedures. It is said that success in current competitive marketplace depends on the quality of knowledge and knowledge processes, especially management.

Knowledge management involves a strategic commitment to enhancing the company’s effectiveness, meanwhile to create more business opportunities.

Davenport etal. (1998) describes four broad objectives of knowledge management systems in practice:

- Create knowledge repository. This aims to achieve a large KM think tank which will include the structured documents with the knowledge implanted in, like presentations, reports, news, memos, articles, what in an easy way that could be searched.

- Improve knowledge access. This goal provides an available way to transfer the knowledge between individuals and organizations.

- Enhance the knowledge environment. The goal requires KM to own a perfect premise for enforcing the knowledge reward, especially with the creation, transfer and utilization.

- Manage knowledge as an asset. Knowledge plays a key role in the company’s balance sheet, especially for the intellectual capital, the present knowledge could bring tremendous profit with the knowledge treasure.

Capturing the intellectual assets for the tangible and intangible benefits for the company is the core sense. The imperative of knowledge management is to transform knowledge to create much value to the processes and operations of the business knowledge strategic to business to accelerate growth and innovation, what’s more, another strategy is using knowledge to offer a competitive advantage for the business.
4.2.2. KM goal in real estate firms
There is strong evidence to learn that the most important motivator for implementing Knowledge Management is to improve the work efficiency. KM is identified a key method to advance the employees’ professional skills and expertise ability. There are also some other factors followed as the motivating factors to influence the KM goals in real estate firms which is shown in table 1.

Table 1: Goals of KM – the main motivators for implementing KM

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Motivating Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To improve work efficiency</td>
</tr>
<tr>
<td>2</td>
<td>To improve knowledge sharing horizontally</td>
</tr>
<tr>
<td>3</td>
<td>To increase customer satisfaction</td>
</tr>
<tr>
<td>4</td>
<td>To reduce cost</td>
</tr>
<tr>
<td>5</td>
<td>To improve knowledge sharing vertically</td>
</tr>
<tr>
<td>6</td>
<td>To increase market share</td>
</tr>
<tr>
<td>7</td>
<td>To encourage innovation</td>
</tr>
<tr>
<td>8</td>
<td>To increase employee satisfaction</td>
</tr>
<tr>
<td>9</td>
<td>To make up for loss of knowledge</td>
</tr>
</tbody>
</table>

4.3. KM barriers

4.3.1. Identification of KM barriers

Many barriers of knowledge management exist along with its procession. The challenging task can be explained intuitively as the following Figure 1.
Figure 3: Knowledge Management Challenges Process

Adapted from: Offsey, S. (1997) “Knowledge Management: Linking People to Knowledge for Bottom Line Results”.

Barriers of technology concentrate on the software systems. The problems are the present systems could not satisfy the demands of the real estate firms.

Barriers of lacking awareness of knowledge management strategies and instruments could lead to high input of time and money, involved in huge difficulty of recruiting the right persons at the right time and position.

Barriers of individuals can be caused by different languages, fear of penalty, idea robbery which needs to protect the knowledge, establish better communication channels and keep good relationships among staff.

The core barrier which plays a significant role in real estate firms is the corporate culture. Sveiby (1997) compared the corporate culture to a company’s spirit reflected in its target orientation and decided by, for example, industry innovation on account of Research & Development, financial performance, or an intense marketing culture with a customer orientation. Work achievement both on vertical and horizontal level are determined by the corporate culture. McDermott and O’Dell (2001) laid stress on the importance of steering the knowledge into corporates’ present values system and the culture style to arrive at a high interaction on both levels, instead of transferring corporate culture into fitting the knowledge management.
4.3.2. Practical methods to remove the barriers

Table 2: Managing knowledge within a process chain

<table>
<thead>
<tr>
<th>Problem</th>
<th>Practical methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficient communication during the chain procession raised by the application of the “throw it over the wall” method.</td>
<td>Additional approach: Build a database application in order to make all staff involve in the process chain and communicate each other sufficiently.</td>
</tr>
</tbody>
</table>

Table 3: Management of design knowledge between design and assembling

<table>
<thead>
<tr>
<th>Problem</th>
<th>Practical methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficient feedback of problems identified in the assembling area for design sector.</td>
<td>Use digital cameras and inner network to solve documentation problems and failures quickly.</td>
</tr>
</tbody>
</table>

Table 4: Methods to KM in Research & Development sector

<table>
<thead>
<tr>
<th>Problem</th>
<th>Practical methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient communication and project specific knowledge is sharing among staff.</td>
<td>Customized coaches for employees. Brain storm around table regularly.</td>
</tr>
<tr>
<td>The knowledge hidden in some projects could not be pointed out.</td>
<td>Design at least four steps for all types of projects so that all details of programs could be divided into distinct structure.</td>
</tr>
<tr>
<td>Time consuming results in low efficiency of management decisions. The research employees could not concentrate on primary task because of small tips and tricks.</td>
<td>Write “To-do list, doing list and done list” on the reminder wall.</td>
</tr>
</tbody>
</table>

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

4.3.3. KM barriers in real estate firms

Within the construction industry, the competition is becoming more and more drastic and the construction projects are becoming more and complex, both requires the employees more knowledge and work experiences. When they utilize the knowledge, create knowledge and share knowledge, they also face more and more obstacles in the knowledge management, even in the on-site construction project. The usual approach taken to handle the urgent upcoming problems is
using intuition deriving from their earlier experience (Gidado, 1996). Refer to the urgency of such situations: the first possible solution is ignoring other possible more correct alternatives (Love and Li, 1998). However, there is a risk that we cannot ensure the method is the quickest and more cost-effective (Yuetal. 2007). In short period, we could not solve the problem resulted from the quality and low productivity level with the knowledge management approach, although this aims to add more attention throughout the construction industry, because this is an industry problem, not a small one.

4.3.4. Positive approaches to overcome KM barriers in real estate industry

The goal of the best positive approach to overcome the KM barriers is to gain the best method for a specific construction production project. All of the attempt activity will be used to improve to meet new requirements, consider new experiences and strive to a rise in productivity.

Fortunately, the Swedish construction contractor JM carried out a countermeasure which is Structured Production. It is actually based on JM craftsmen’s knowledge and experience about the construction production (Niklasson, 2011). They standardize the construction production process in terms of methods, materials and machinery. JM tries to build accordance in their process by preventing the potential construction production disturbances. Even if JM set a good example to against the barriers of knowledge management, there is still big challenge on the identification and internal transfer of the knowledge in real estate industry. O’Dell and Grayson (1998) argue that the distinction and transfer of practices is more and more complex and time-consuming than the people generally imagine.

Another successful case is Skanska, which is a leading firm in construction industry in Sweden. It develops an approach in order to make use of the existing knowledge in the company. Their goal is to develop a model where best practice construction production methods within the company are identified, created, distributed, applied and continuously improved by their employees. The methods differ between specific projects and geographical locations.

4.4. KM efficiency solutions

The efficient KM technology and systems can be considered as one of the KM solutions because
of its unique traits:

- Aggregative—The best KM products and programs increasingly gather in a whole organization from all single section;
- Measurable—It depends on a huge database;
- Safety;
- Strong offline analysis;
- Timely and relevant;
- Tolerance for complex queries of individuals;
- Flexible—the technology could be adapted in any situations and deal with different subjects, like from media to structure projects etc.
- Adversary—the system and solution should provide more and more options in order to solving the problems with plenty of knowledge.
- Quick and easy to distribute deputies;
- Extensible—the solution is able to expand as required by the company;
- Obedient in real estate industry standards, giving the company abundant space to integrate the exist resources;
- Heuristic optimization method—the solution and the system need to learn about the user base and the process of sharing knowledge. Properly speaking, if the solution could help people solve a particular problem in a small field, then it should have the capacity to solve other problems in bigger fields.

4.4.1. Disciplines of KM sources

4.4.1.1. Knowledge management sources

The knowledge management includes a lot of sources, instead of one element, it could not be identified to use one conception distinction, but with available new system. The generation of the knowledge management sources is not a simple step, which is a complex performance gradual altering process. The sources of knowledge management can be explained by the following table5.
Table 5: Sources of knowledge management

<table>
<thead>
<tr>
<th>KM Cluster</th>
<th>Specific content</th>
<th>Internal intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business intelligence</td>
<td>Competitive intelligence professionals</td>
<td>Making decision for the strategic process</td>
</tr>
<tr>
<td>Business information process</td>
<td>Information technology support, software innovation</td>
<td>Information system</td>
</tr>
<tr>
<td>Business development</td>
<td>Capacity strategy maker, innovation promoter, HR developer, finance officer</td>
<td>Management practice and trainings</td>
</tr>
<tr>
<td>Business knowledge identification</td>
<td>Decision maker of knowledge collective process</td>
<td>Organizational knowledge management process</td>
</tr>
</tbody>
</table>

4.5 Disciplines of knowledge management sources

The knowledge management has shown that they need to support the disciplines in the process, which range from the education methods to professional sciences for the management people. The real estate firms are now more and more realizing that they should build up new system for the discipline of knowledge management sources which would make them survive in the severe competition environment. Of course the specialist of KM field raised some good advices for the management people in the real estate industry, which can be performed as the following figure.

The disciplines for the knowledge management works like a rule for each department to share their own knowledge, they should adapt the proper method and proper way to let others know their knowledge and then people from other departments can gain valuable knowledge and promote their work efficiency. So the disciplines of knowledge management provide an ideal way and method to achieve the knowledge sharing process, especially for the real estate firms.
In the practical world of the KM knowledge management disciplines, the nature of the procedure is always shifting from one side to another. We have also some clear targets for the routine processes and also they have different roles in the process. Maybe it is not so perfect for the explanation of disciplines of knowledge management, but it is a good promotion for us to understand the work procedure of disciplines of knowledge management.

As shown in Figure 4, the disciplines make changes in the KM process can be explained like this. Procedure of KM process is the routine which is easy and can be used reiteratively and popularly. The transformation of KM process is logical and not so common for the routine situations of KM process. The expected extensions of the KM process are complex and expected with external KM factors. The unexpected challenges of KM process are a mixture with the external KM factors also. The unexpected condition of KM process is non-routine and within a certain routine and scope. The unusual process of KM is outside a certain scope. The targets for the intelligent KM process are the procedure (routine) and the transformation of KM process. The conventional distribution of the KM is targeted with the transformation. The future distribution of the KM is expected extension. The potential of delivering work which requires greater knowledge is the unexpected challenges, unexpected condition and unusual process of KM.
- Information technology is required to establish the related infrastructure and professional abilities.
- Engineering knowledge is desired to make innovation system for the work condition.
- Emotional knowledge is to know how wonderful the knowledge managers support the functions for their work related environment.
- Management knowledge is to encourage the management people make better efforts for the science and technology innovation.
- The knowledge engineers are required to codify the collective knowledge once it finished the collection.
- Real estate business theory, including the basic level and the advanced level, should be applied for the knowledge management evaluation process.
- Knowledge identification requires the individual functions to decide which knowledge is available for the people to collect.
- Knowledge efforts alignment is desired to make right direction to realize the best worth for the knowledge management practice.
- Knowledge system could make the management system professional and more effective.
- Implementation of knowledge management is also beneficial for the people to pursue the best value for the KM process.

4.5. KM business process model and innovation

4.5.1. KM business process model theory

Davenport (1993) pointed out that the business process is a structured and measured, controlled and managed the series of interrelated and interacting actions that utilize the resources to transfer the entering into the specific exportation for a special customer or a market whose end will be performing the largest value for the business providers. Knowledge management business process is explained as the actions or operations or series keeping to an end or a result for the collective knowledge.
4.5.2. KM business process model category

According to the previous study, there are only two Knowledge Management business modeling type, which are behavioral models and activity models.

Behavioral models are not focus on the details of related resources of the knowledge management in one company, but it concentrates on the whole process of knowledge management. All of the events and subjects of knowledge management should be identified within the whole business process model and it will track all of the behavioral rules and related events that have been performed.

The activity models can be explained as the main business process type comparing with the behavioral models. It focuses on the specific activity and items that have been performed in the business process of knowledge management in the company. The activity can be closer with the products and consulting services for the real estate companies. There are four main characteristics that the activity models own, which are control product relationships, necessary resources and important roles, body structure construction, needed ingoing and outgoing resources.
4.5.3. KM business model innovation

A business model design is the totality of how a company selects its clients, defines and differentiates its responses, defines the tasks it will perform itself and those it will outsource, configures its resources, goes to the market, and creates utility for the clients and gain profits (Adrian Slywotzky, Value Migration, 1999). It is the whole system for transferring the utility to client and earning a profit from the relevant activity.

Generally speaking, there are three roles of the users in the business model innovation: designing for users, designing with users, designing by users. For the first generation that is the designing for the users, they rely heavily on the professionalism, and the professionals create a design. The second generation is designing with the users, they rely heavily on the participation of persons who are involved with the designed products and take some potential contribution to make during the design process. The design process is also open to the designers and they are responsive to create new input to the special field. All of the designers are considered as a contributor to the integration of a participative design process than as a pure professional. The third generation is designing by the users. If the design is related to the user’s level in the development and it can be considered very successfully. The best way for the users to make sure the process is that the design will serve the purpose of the organization that is to include the stakeholders in the formulation of the design.

4.5.4. KM business model applied in real estate industry

As we all know that Knowledge Management model has critical implications for the real estate business and its related utilities because of the nature of the knowledge of the potential impact of knowledge concept in real estate industry. KM business model also provides a lot of opportunities for the real estate firms to establish the relationship and connection between all of the real estate firms. There are several specific items that should be included in the KM business model which applied in the real estate industry, like IT support, human resources, intellectual capital etc. There should be stable line connecting all of the items and constitute to become a
circle in the KM business model in real estate industry. This explanation can be shown as the following figure:

![Figure 6: Implications of KM Strategy](image)

5. Empirical results analysis: cases of KM in Chinese and Swedish real estate firms

5.1. Introduction of Vanke—Chinese firm

5.1.1. Vanke presentation

\(^2\)China Vanke Co., Ltd, was established in 1984, began to engage in real estate industry in 1998, and became the second company listed on the Shenzhen Stock Exchange in 1991. Through the development of more than two decades, Vanke has become the largest housing developer in China, whose business covers 53 large and medium-sized cities in the Pearl River Delta region, the Yangtze River Delta region, the Bohai Economic Rim as well as central and western parts of China. In the past three years, the average number of homes sold annually has exceeded 60,000. In 2011, sold floor space totaled 10.75 million square meters and sales reached RMB 121.5 billion, the largest in the global real estate industry.

Vanke sustained growth with the standardized and transparent corporate governance structure have been widely recognized among investors. It has been successively put on Forbes’ 200 Best

Small Companies List, Asia’s 200 Best Under a Billion List, and Asia’s Fab 50 List, and presented with best corporate governance awards and best investor relations awards by internationally authoritative media such as IR Magazine.

After years of efforts, Vanke has gained a competitive edge in the housing industry. Vanke has become the first well-known trademark in the housing industry, and its sub-brands such as “Wonderland”, “City Garden” and “Golden Homes” are very popular with consumers across China. The “Scenario Garden House” developed by Vanke is the first patented product as well as the first patented invention in China’s housing industry. Vanke’s property management division is among the first ISO 9002- Certified property service providers in China. The Vanke Property Customers Club is the first customer relations organization in China’s housing industry. What’s more, Vanke is the first real estate enterprise in China that hires a third-party institution to carry out an all-round customer satisfaction survey every year.

Vanke is dedicated to leading the industry in energy conservation and emission reduction, and promoting green buildings and housing industrialization. During its great development, Vanke has made active efforts to fulfill its social responsibility.

Vanke supposes that the main reason of its success is the commitment to the ethical business conduct rules and the professional knowledge management within the company. With a harmonious corporate culture and a transparency development pattern steadiness, Vanke has grown into a top one enterprise which is mostly respected by the public, also by their customers, providers, investors, employees and other stakeholders. Devoted to its outstanding performance in the corporate governance and management, Vanke has been honored as one of the “China’s Most Respected Companies” in China.

With effective and successful knowledge management strategy, Vanke has been committed to improving the product quality. Until 2011, there are 26 projects of Vanke had won the China Civil Engineering Zhan Tianyou Award “Outstanding Community Gold Award”. Among these projects, Zhongshan City Scenery, Guangzhou Wonderland, Tianjin Vanke Crystal City was presented with China Civil Engineering Zhan Tianyou Award successfully.
We can easily find that Vanke has made active efforts to fulfill its social responsibility also with its great business performance. In 2008, Vanke Foundation was officially established with the authority of the Ministry of Civil Affairs and the State Council. The present donations for charity projects have more than 59 million RMB. In 2011, Vanke provide 17.95 million RMB to finance projects mainly on the treatment of serious illnesses of impoverished children and environmental protection.

Vanke was born to stand for “a healthy and enriched life”, and make great efforts on the balance between work and life. It provides all of the employees with sustainable development chances, and also encourages them to grow up with company together. Vanke admires simple interpersonal relationships within the company, and devotes itself to creating a perfect working atmosphere that can help employees fully develop themselves. In 2011, Vanke was selected as one of the world’s top 25 employers in the Best Employers in APAC 2011 Study organized by Aon Hewitt, a global human resources consulting firm, which makes it one of the “China’s Best Employers” for a long time.

There are hundreds of thousands of people working hard on the construction projects which are developed by Vanke every day. There are many problems caused by illness poverty and they generate bad effect on the development of the employees and the company. Vanke has been always concerned about all of these problems and offer possible solutions to them. Vanke announced 5 million RMB to establish the Corporate Citizenship Fund to initiate the Spring Action project also authorized by the general meeting of the shareholders in April 2011. This project is subject to help labor workers who cannot afford the high cost of treating the serious illness of their own or their spouses and children, even their children’s education. What’s more, the project worked with the construction contractors and other partners to build up a platform for labor workers to help each other.
Corporate real estate management enterprises rely on the mental enterprise. Although the real estate business development is the basic process of each project is conceptually the same, but the process cannot be standardized, not like the general manufacturing plant in a pipeline within a few hours in accordance with standardized processes and procedures can complete the production process. Each real estate project has its particular market environment, customers, planning conditions, product design, construction, marketing process. Therefore, each project according to the particularity of the project itself to a series of business planning and management control process. In this particular process, tacit knowledge has played a central role of organizational decision-making process, which means that human factors play a significant role. In Chinese special market at present, participants need market information, explicit knowledge of professional specifications, drawings and process documentation of the basis for analysis and decision. Therefore, the core of the real estate enterprise knowledge management is to build up a mechanism and platform of a tacit knowledge and explicit knowledge interact, tacit knowledge to be able to express a positive impact on the management process, and transformed into the enterprise was shared by knowledge, the outside into the management file.

The mechanism of the role of knowledge management in Chinese real estate firms is to make business decisions to maximize use of valuable explicit knowledge and tacit knowledge, while admitting the enterprise intellectual capital of the continuous accumulation. For employees, the corporate knowledge base and exchange platform is to help employees through learning internalization to increase their knowledge and ability to contribute to the ability of the staff, which is a corporate explicit knowledge and tacit knowledge of others into their own the tacit knowledge of the process.

To analyze the management activities of enterprises from the perspective of knowledge management, this is not only a simple work to promote and arrive a result, but a continuous learning and knowledge input and output process, tacit knowledge in the specific work process, met the right environment and opportunities will be released. Tacit knowledge is the human
potential; it needs the external environment pressure. Otherwise, it will be the same like the silence of the iceberg submerged under the sea. Recognizing the value of tacit knowledge to make people from a new perspective to evaluate the value of employees is beneficial to create a loose free exchange of corporate culture, respecting for employees ideas and values.

The main resource of knowledge is books or education and training in the principles of knowledge and factual knowledge, but the enterprise business decision-making process is essentially a knowledge innovation, because the business decision is not a simple copy, but a complex one needed by the large number of explicit knowledge, tacit knowledge, social relations of knowledge consisting of a large number of cross-integration between them. General information management focuses on the establishment of the knowledge base, knowledge management sucked people, information resources and communication platform for integration in an interoperable environment, enhance staff at all levels of decision-making and action.

For business knowledge management in China, they have no concept of knowledge management, information management is far from perfect, it is not clear what the company already has and what knowledge they do not know, even for some real estate firms do not know how to store and use the important knowledge, there is no established corporate knowledge base, there are only files file system which are not enough.

We are in a vagary market environment today, flooded with a lot of information around; we need insight to discover the real value, according to the information used for decision-making. At this time, the enterprises are owned by members of the strategic vision, experience, intuition, and insight on the filter and weights and measures, so knowledge management, even the data management, information management play a key role in the real estate industry, the related enterprise truly focus on the value of intellectual capital.
5.2. Cases of KM in Swedish firms

5.2.1. NCC Property Development Presentation

3NCC Property Development sells commercial properties in defined growth markets in the Nordic countries and the Baltic region. They focus on the customers seeking inspirational and sustainable environments in properties that will provide a stable and secure return over time. NCC always strive to exceed customer expectations, they are involved all the way from the initial project idea to the final property sale. The fierce market competition requires NCC to act quickly meeting the demands of customers, their good knowledge management system; broad network of contacts, leading construction technologies provides the outstanding strength.

Brief facts about NCC Property Development

- Named the best property developer in Nordic 2010 by Euro money.
- One of the leading developers in the Nordic region.
- 110 employees in Sweden, Denmark, Finland, Norway, Latvia, Saint Petersburg.
- A large number of ongoing projects in the Nordic region. In addition, there are several planned projects.
- A small company with a personal touch, but with the strength of a big group.
- A community developer with experience gained from decades of close cooperation with both the public and the private sector.
- Became a Green Building partner as early as 2006 and the first developer in Europe to become Green Building corporate partner. Green Building is the European Commission’s program for energy efficient buildings.

All of the knowledge and experiences of NCC people is to create the environment for the future responsibility and the inspiring challenge that is the concept of Green Building, BREEAM and reducing carbon-dioxide emissions.

The topic of survey is “Knowledge management in Swedish real estate firms”. The survey

3 Source: www.ncc.se
www.ncc.no
questionnaire includes 8 main parts which part owns 2 questions, so it has 16 questions in total. (See appendix1.)

We found 50 real estate firms and related firms in Sweden and got some important persons’ contact information from the website fortunately. According to the survey monkey website, email contact, telephone contact, I have finished the whole survey investigation in Swedish real estate firms. They seem to be very interested in this topic—Knowledge management in Swedish real estate firms, they also gave me some advices about my research and I appreciate their work and help for me. According to the research process, I also realize that the knowledge management is so important for a real estate company’s development, especially for the knowledge creation, store and share process etc. I also find the same condition in Vanke, the leading Chinese real estate firm, but it does not seem like other Chinese real estate firms, which implies that the Chinese real estate firms should focus more on the knowledge management within the corporate, also with more concentrate in the corporate culture.

![Figure 7: Survey part of business type](image-url)

For the question that is which type of business does your firm belong? The respondents are
10.2% developers, 6.1% contractors, 40.8% consultant, 2.0% distributors, 34.7% property management agencies, 6.1% universities and no NGO.

For the question which is about the work experiences with the current firm, there are 15% respondents are less than two years, 40% of respondents are between two and five years, 21.7% of respondents are between six and ten years, 23.3% of respondents are more than 10 years. Hence, we can find that the work experiences can be related with our valuable results of the survey.

According to the two pictures, we can see that our basic data is from the real estate consultant companies and the property management agencies. The survey candidates’ work experience is mostly between two and five years. Also they own the work experience between six and ten years and more than ten years.

Refer to our survey results; it is easy to find that most candidates consider that the economic and accounting knowledge is very important for them and their job need them to obtain basic and good skills. This evidence is matched with our knowledge management model theory in the field of innovation. It also give us inspiration that we should preserve the economic and accounting knowledge which can be benefit for the real estate companies in Sweden.

For the part of the administration management knowledge, it is also realized as the important skills to gain, and people should own good skills of administration management knowledge in the
real estate industry.

As we all know, there are a lot of job position categories in real estate companies. Sales and marketing department plays a key role in the company development, because it can make effect on the profit section directly. The survey tells us that the knowledge about the sales and marketing development is extremely important for people to obtain and at least good skills are needed in Swedish real estate companies.

Furthermore, we get to know that the customers’ feedback can influence the lifeline of a real estate company, especially for the important corporate clients. The survey says that almost people consider the customer and personal service knowledge is extremely important to manage and they are needed to have professional skills. This evidence can be explained by the knowledge management process model which is clear with the formal awareness and the informal awareness.

We also can get more information about the human resources knowledge management is important for the management people to gain and basic skills are needed in this field.

For the professional practitioners in Swedish real estate industry, it is extremely important to possess the commercial property investment and management knowledge and professional skills are needed for them.

In the basic practical part, the computers and software knowledge is important for people to have and at least basic skills are needed in the real estate firms. At the same time, the language skills play important role in the knowledge management and the good skills are needed. I suppose that this kind of evidence does something with the customer service and commercial property management knowledge, which is connected with the Knowledge Management innovation model in the front analysis. The connection of the survey with the research theory in Swedish real estate industry can be found in the next section.

5.3. Comparisons between Chinese and Swedish real estate industry
5.3.1. Analysis

To analyze the difference of knowledge management in Chinese and Swedish real estate firms, first of all, I believe that the cultural background affects the knowledge management attitude and operation way strongly.

For our purpose here, we distinguish between Chinese firms and Swedish firms. People may think that Sweden and China have very little same thing in common. But this is said for general extent, they have differences absolutely, also they hold common points in commercial real estate investment knowledge field. For example, they consider the commercial property management and customer services as the most important knowledge and skills to hold. According to the lessons of the Swedish experience has been the importance of the property knowledge management style and skills for the real estate industry development, China learns a lot in the KM field.

5.3.2. Focus point of KM in Chinese firms

Generally speaking, there are three big points of knowledge management in the Chinese real estate firms, especially focus on the commercial property service industry.

*Focus 1: Property product Library and map.*

Consumer insight and product process are the most difficult technical part in the whole industrial chain of real estate service provider. Industry product trends, product case studies, product and brand strategy, product line, project positioning and product positioning, product design, product and customer alignment, product value system, product sales rhetoric, products, advertising appeals, in accordance with the workflow divided into at least module of the above-mentioned segments. Simply to say the product case studies can be subdivided into: planning, style, category, facade, size, decoration, and the supporting. The system can be complete; the task will be very complicated.
Why Product Library so important? Based on consumer demand, according to market analysis obtained, is the core value of the real estate service providers to product positioning and design advice to developers trusted. After research found that for the sales agent for real estate service provider, product knowledge is also the team the most pressing needs. For businesses, consultants for the core business, product knowledge, or intellectual assets is an important part of the core competitiveness of enterprises.

Fortunately, the service providers contributes more and they can serve many customers in the product library which is useful to build has its own advantages. The emphasis is on knowledge map according to the classification of the workflow or other real estate properties to do.

The importance of the knowledge of experts is also fully reflected in the product areas. Well versed in the product within the enterprise in real estate service providers, experts often few (comparative sales management, market research, very few experts of the products), how to make the tacit knowledge of these experts heritage effective knowledge management important task.

Focus 2: the case of the property field of standardization.

The field standardization is the sole of KM in Chinese real estate firms. All real estate service providers are applicable to this case. Thus, we see the refinement of the knowledge modules in the case of field the whole camp has become another extremely important task of knowledge management.

The reason is obviously how to ensure that the country hundreds of cases of field implementation of standards can represent enterprise standards, how to get buyers to enter the case of sales of every one and the same of developers in different cities can get the same service, service value achieved the key point. The special nature of real estate is not moving, but the service provider's sales and service can and must be the mode of replication.

The so-called case of the whole camp modules, including but not limited to the following breakdown of modules: marketing strategy, marketing strategy, sales strategy, the case of farm
management, information management, process management, customer management (developer),
customer management (buyers), supply Business management, property management, and so on.
Each module can also be subdivided. Successful national sales agents are the case of standardized
construction done a good company.

Where is the difficulty in? Difficulties locate in the case of performance-oriented field, how to
achieve knowledge sharing. If the consulting services for real estate properties is not so strong
(basically the kind of service can fly operation, although the group companies also have regional
and urban institutions), then the sales agency services are the principle of territoriality. Decided
to head butt, local protectionism, each enterprise will be faced with the problem must not let
outsider’s fields, including intelligence assets, particularly evident in the case of field.

How to solve? Three key parts of KM: Knowledge Base, knowledge communities, knowledge
experts. The three aspects of thinking, process management, quality management, customer
relationship management, composite, and training systems, performance appraisal, and other
associated operation, and gradually advancing.

Focus 3: best practices and methodologies in property knowledge management.

If a real estate service provider in the field two aspects of the product with the case ahead of peers,
then it must be an industry leader in the Group, if the companies want to become the absolute
leader of the industry, as you know, it is necessary to go beyond the industry average level of
industry standards.

Easy Home CRIC China Real Estate Information Group, the Shanghai Youth Meeting, the new
Bay City, Shanghai, Pudong Star River, Guangzhou Asian Games City, Hainan Agile Clear
Water Bay, etc. absolutely serious cases across the board summary, well, best practices, best
practices team to maximize the value of best practice cases to play, will be one of the decided to
group the next step in the development of strategic issues.

The overall operations of real estate projects, easily ranking China the famous three vertical and
three horizontal model, the CRIC vice president, Liu Wen-chao, summed up the easy Habitat map type consulting methodology, then the next in the planning, marketing, public relations, advertising and other sub-modules Group-wide unified methodology is gradually being explored. Residential real estate is relatively mature, and land operations, tourism, real estate, commercial real estate, business consulting and new business segments in urgent need of a unified standard.

Easy Home on the harmonization of the strategic significance of China Zhou Xin Chairman also mentioned in the speech of the new decade journey, a very important one is the uniform standards. In my view, this standard must include professional and technical standards, is the need for a unified methodology. Only in this way, around the items you can take this foundation, to provide customized services in the enterprise as a whole above average for different customers.

The real estate industry is still in the stage of barbaric growth, knowledge management in the real estate industry is also a relatively late start as real estate service providers, and the performance of knowledge management, under the king is leading companies to gradually push forward.

5.3.3. Focus point of KM in Swedish firms

In Swedish real estate industry, knowledge management is considered as a business strategy. The Swedish companies recognize that knowledge management is the key to long-term development and enhance their competitiveness, and their knowledge as a product, knowledge management, convinced that knowledge management will directly leave a significant positive impact on business efficiency and viability. Such strategies should be applied to sales knowledge-based real estate enterprises.

The customer-oriented strategy is designed through the acquisition, development and transfer of knowledge of customer needs, preferences and business conditions; these are aimed to improve the competitiveness of enterprises. With this strategy, the management class believes that enterprise persuades their customers to understand more and more effectively in order to meet customers’ needs. There is one strategy that is applied by the Swedish real estate industry which is knowledge management belongs to employees’ responsibility. This strategic supports the
individual employees to establish the right to identify maintain and expand their own knowledge and to update and share knowledge assets with a sense of responsibility. They tend to give every employee to recognize the important value of the knowledge of the highly competitive nature of the work entrusted to them.

Another focus point is the transfer of knowledge and the best practice strategy. The purpose of the KM strategy is to improve the management level of knowledge for the sectors of products and services, including acquisition, organization, reconstruction, storage section, as well as the distribution of knowledge systems and practices. They argue that this strategy enables them to significantly reduce the turnaround time and cost, and more effectively meet the target customers' needs and increase sales finally. The intellectual asset management strategy applied in the Swedish real estate firms revolves around patents, technical support, operational and management practices, customer relationships, organizational structure and other intellectual assets. Management focuses on updates, organization, evaluation, protection, and improves asset utilization, and makes it market-oriented.

The innovation and knowledge creation strategy emphasizes the creation of new knowledge through basic research and development and applied research and development. The company believes that the innovation is the core of growth of the unique knowledge and expertise to enhance their competitiveness in the real estate market.

The real estate enterprises may choose at least one type of knowledge management strategy for their own development according to their own actual situation; several strategies can be combined to form their own unique strategic model. The implementation of knowledge management platform is designed for the selection and implementation because there is no uniform definition of knowledge management in the early stage. Implementation of knowledge management and organizational structure should add the proper adjustment on it. As the social development is changing day after day, the traditional organizational structure cannot adapt to the increasingly fast-changing business environment, knowledge-based organizational change has become the trend.
Knowledge management and organizational structure of enterprises is based on the operation of foreign enterprises which is guaranteed by the organizational structure of enterprises, it is whether or not the decisive factor in the development of enterprises, to enable businesses to a whole greater than its part, is an important source of competitive advantage.

Knowledge management is considered as a respond to the challenges of the knowledge economy the inevitable choice, especially for the Swedish real estate industry; in fact the management people capture the valuable knowledge and information of inside and outside the enterprise, and the use of maximum performance, and enhance their competitiveness and achieve business goals in the process. The organizational structure is the division of labor and coordination tasks, organizational structure is reasonable or not, a direct impact on the organization fulfilling its functions. Therefore, the success of the enterprise's knowledge management or whether its organizational structure, both of which depend on the organizational structure of enterprises can make the proper adjustments according to the requirements of knowledge management, this adjustment should be considered a condition variable, mainly due to strategy, technology, human resources and the environment in four aspects.

In Sweden, the traditional hierarchical organizational structure cannot meet the requirements of modern enterprise. Organizational structure from hierarchical to flatten has become an inevitable requirement for the development of enterprises. The achievement of organizational structure flat by the hierarchical structure is to gradually transition to a flat structure to reduce the intermediate level, increase the range of management, the promotion of information and knowledge transfer and communication.

Flexible organizational structure, that is, in order to achieve a certain goal with different knowledge and skills in different areas of work, employees concentrated in a specific dynamic group together to complete a project until the completion of the project team members rejoin. Dynamic team organizational structure is flexible, adaptable, suited to individual tacit knowledge to create and play, and combined with the group to achieve innovation.

For Swedish real estate knowledge workers, the horizontal and vertical expansion of the scope of
work helps to understand the whole picture and work responsibilities, and eliminate the fatigue and boredom brought about by the simple duplication and increase the enjoyment of work; for enterprises get a versatile, staff morale, and will also receive the hope of business intelligence in a relaxed and pleasant environment, access to a wide range of knowledge and information based on people's creative inspiration prone.

Flexible organization is a knowledge-based organization, it reflects the unity in the unity and diversity: centralization and decentralization, unity; Stability and dynamics of the unified; Flexible organization with quick decision-making, ability to adapt to different environments, and can quickly adjust the core competitiveness on the basis of strategic direction, to avoid the threat, and shows the level of specialization in the process; From another perspective, it can to endure the negative effects of change, showing the characteristics of a strong, ductile, and be able to recover from the brink of crisis, to avoid damage.

According to the survey results and the analysis of the theory, we may find some connection points between the theory and Swedish real estate practical world. For Swedish real estate firms’ management class, they think that the customer services skills are really needed and requires them to own very professional skills, or at least good skills. We found that the focus point of Swedish firms is customer-oriented strategy, so it is very consistent. We also can get the result of the requirement of the IT knowledge and language skills for the Swedish companies, they believe that they should own good knowledge and professional language skills in the real estate industry, this is matched with the another focus point which is the transfer of knowledge and the best practices strategy for Swedish firms. Of course the survey results told us that the real estate knowledge also contains the skills of economic, marketing, human resources etc and they constitute the whole structure of the KM system, it matches with the focus point—organizational structure, including the horizontal and vertical expansion of the scope.

5.3.4. Conclusion of the comparison of KM focus point in the real estate firms between China and Sweden

From the following comparison table, we can find that the Chinese real estate pursue the property
profit much more than the long term strategy construction, they consider the knowledge management as a tool or a good way to serve the economy profit for the company, it is lack of the long term consideration and may bring no good future development for management class in the real estate companies, while Swedish companies focus on the long term knowledge management planning and strategy, they construct the structure of knowledge management from the beginning and do not pursue the short term economy profit, hence, they own the better knowledge management practices and solutions.

Table 6: Comparison of focus points between real estate firms in China and Sweden.

<table>
<thead>
<tr>
<th>China (focus point)</th>
<th>Sweden (focus point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property product library and map</td>
<td>Customer-oriented strategy</td>
</tr>
<tr>
<td>Property field of standardization</td>
<td>Transfer of knowledge and the best practices strategy</td>
</tr>
<tr>
<td>Best practices and methodologies in property knowledge management</td>
<td>Organizational structure, including the horizontal and vertical expansion of the scope.</td>
</tr>
</tbody>
</table>

6. Driving forces of KM process

As the importance of knowledge management in real estate industry comes into people’s eyes, it is very necessary to pay attention to the driving forces of competition, new operating and management experiences, market strategy demands and the information technology in KM methods.

6.1. Internal driving forces in KM process

Many real estate firms have established their own systems of knowledge management and they are changing all the way in order to meet the needs of every sector.

- Growing information technology abilities. Companies create more and more advantage in information technology which can assist better the knowledge management process, such as the advanced search engines, natural language understanding and the IT support systems and technologies.
Promoting the work productivity for the companies. As we all know, the real estate industry productivity is restricted by the information work frame and the flows of work frame, especially the production technology. The real estate firms must invest more in the organization work frame and system establishment, the technology and logistics technology development, the improved productivity technology, the information technology etc., by doing so the growing intelligent automation of the work method could finish more tasks than before.

Comprehending the real estate knowledge functions. Real estate industry people work for the performance of the company at the most extent. When the management class decides to apply the knowledge management method, the productivity performance plays a key role in the affection of the decision making and some other steps of the knowledge management procession.

6.2. External driving forces in KM process

The knowledge management process in real estate firms often meet some conditions they cannot control sometimes, they need the external driving forces to keep on the important part and also with the knowledge and information support. We can be explained with more details as the following figure:
Experienced competitors. The severe competition usually forces the management class to implement the innovations in services, qualities and productivities. To catch up with the latest development, the knowledge management should be aware the advanced competitors during the whole process.

Experienced customers. The life line of real estate firms is the customers and they consider the customers as the gods. Once the customers raise new requirement and other demands, no matter the individual or collective, the firms should meet them as soon as possible. The competition environment is also very severe for the management class; they should utilize the knowledge management process to achieve this.

Experienced business partners. To provide the best service and survive in the real estate industry, the management people of company should pay attention to establish a perfect business cooperation network with the related partners which will be beneficial from the good network and improve their own ability with good efforts.

International business trend. Nowadays the real estate firms are expanding their international business more and more and they tend to offer best service for their more and more international customers. This requires the management class to consider the international operation and develop the international strategy to survive by being effective in operations, creation and innovation of products and services, marketing strategies etc.

7. Conclusion

This paper developed a further knowledge management process model framework and their complicated mutual relationships. The knowledge related real estate industry has also been identified by the author more clearly and largely. People can also understand the author’s main structure about every research subject of knowledge management, including the process, model, further innovation exploration etc. What’s more, the specific case from two totally different countries also can represent the author’s purpose in the knowledge management research field in Swedish and Chinese real estate firms.
As the business process models have been embodied by the particular information and category description, we hope to achieve some goals and share the knowledge management framework with others:

- States major knowledge types, stages in the knowledge activities during the KM process;
- Provide the useful solution which can avoid the knowledge management barriers in real estate firms;
- Identify the relationship between the explicit knowledge and tacit knowledge in the real estate firms;
- Promote the significance of the transformation process for the knowledge management control in real estate firms.

Knowledge management in real estate industry depends on several factors, like cultural and technological knowledge processes of creation, storage, sharing and transfer among the real estate employees. It is very essential to develop a specific knowledge management strategy for real estate industry, one way is to recognize the functionality and features of KM products in real estate; another is to be realized the company’s goals and very important achievements which need to carry out the KM programs if necessary, the other one is to utilize the IT technology which can be used for the KM program. Even though we have the strategy to solve the KM problems, we also meet the barriers for the knowledge management in the real estate firms. The main barrier for the knowledge management in the real estate firms are the corporate culture of the firm, also with the real estate knowledge scale and other technical issues. The best way we have found is to identify the real estate knowledge management barrier is to utilize the proper knowledge management methods. We have also two kinds of KM model to overcome the barriers we have to meet on some extent which are top-down model and bottom-up model. Top-down model is more available and popular than the other one.
8. Reference


9. Appendix 1—Questionnaire sent to Swedish real estate firms and organizations

Questionnaire

- Economics and accounting
  --Knowledge of economic and accounting principles, the financial marketing, banking and the analysis of financial data in real estate firms.
  1. How important is ECONOMICS AND ACCOUNTING knowledge area to the performance of your current job?
     ◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important
  2. What level of ECONOMICS AND ACCOUNTING knowledge is needed to perform your current job?
     ◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

- Administration and Management
  --Knowledge of business and management principles, including the strategic planning, resource allocation, human resources operation, leadership technique, production methods, coordination of people and resources in real estate firms.
  3. How important is ADMINISTRATION AND MANAGEMENT knowledge is needed to perform your current job?
     ◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important
  4. What level of ADMINISTRATION AND MANAGEMENT knowledge is needed to perform your current job?
     ◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

- Sales and Marketing
  --Knowledge of principles and methods for marketing, promoting and selling properties in the company. This area involves the marketing strategy and statistics, property demonstration, sales modeling and techniques, and sales control systems in real estate firms.

Source: http://www.harvey.psy.cvt.edu
5. How important is SALES AND MARKETING knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

6. What level of SALES AND MARKETING knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

- Customer and Personal Service
  --Knowledge of principles and processes for customer and personal services. This part includes the customer demand investigation and assessment, follow on meeting quality standards for services, and evaluation of customer satisfaction in real estate firms.

7. How important is CUSTOMER AND PERSONAL SERVICE knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

8. What level of CUSTOMER AND PERSONAL SERVICE knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

- Human Resources
  --Knowledge of principles and procedures for human recruitment, selection, tanning, compensation and benefits, labor negotiation and personnel information control systems in real estate firms.

9. How important is HUMAN RESOURCES knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

10. What level of HUMAN RESOURCES knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

- Commercial Property Investment and Management
  --Knowledge of principles and procedures of commercial real estate investment and management. This area involves the investment strategies of purchase, ownership, management, rental and sale of property for profit, the management of cash flow and fixed
properties, the tools of construction or repair of houses, buildings or other structures of properties.

11. How important is COMMERCIAL PROPERTY INVESTMENT AND MANAGEMENT knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

12. What level of COMMERCIAL PROPERTY INVESTMENT AND MANAGEMENT knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

Computers and Software
--Knowledge of computer operation and important office software. This part includes the computer daily operation, real estate work related application software and programming which will improve real estate business efficiency.

13. How important is COMPUTERS AND SOFTWARES knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

14. What level of COMPUTERS AND SOFTWARES knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement

Language Skills
--Knowledge of the structure and content of English, Swedish, Chinese and other languages, including the application skills, communication skills and negotiation skills.

15. How important is LANGUAGE SKILLS knowledge to your current job?
◇ Not important ◇ Somewhat important ◇ Important ◇ Very important ◇ Extremely important

16. What level of LANGUAGE SKILLS knowledge is needed to perform your current job?
◇ Professional skills ◇ Good skills ◇ Basic skills ◇ No requirement