

**KNOWLEDGE STORAGE AND RETREIVAL PROCESSES
TOWARDS CUSTOMER PERCEPTION: A THAI COMPANY
CASE STUDY**



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Thematic paper
entitled

**KNOWLEDGE STORAGE AND RETREIVAL PROCESSES
TOWARDS CUSTOMER PERCEPTION; A THAI COMPANY
CASE STUDY**

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ABSTRACT

This study has analyzed the knowledge storage and retrieval processes towards customer perception within the Siam United Steel (1995) Co.,Ltd. The research utilizes the qualitative approach using the in-depth interview. Marketing and Customer Service department of the company has been chosen as an example for the department of Thai company that has been implementing the knowledge storage and retrieval processes within the company. Executives and customers of the company were interview to reflect the information and responses from the process.

This study has shown that the customers have realized about the knowledge storage and retrieval processes within the company. Especially, the claims for material defects have been delay due to multiple approvals of managers. Since company has been implement SAP system, they will be able to adjust it to reduce the time of approval by utilizing knowledge storage and retrieval processes within their system. This adjustment will increase customer satisfaction by improving a better perception of customer towards the company's system. It will lead to a better brand image and brand loyalty which will lead to higher profits of the company.

KEY WORDS: Knowledge Management/ Storage and retrieval processes/ IT
Implementation/ Customer perception/ Brand

29 pages

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CHAPTER I

INTRODUCTION

1.1 Abstract

Nowadays, the world of business has rapidly changed. With the highly competitive environment, companies need to strive to sustain the competitive advantages. One of the most important competitive advantages of the organization today is knowledge. Many companies have been recognized knowledge as a valuable organizational resource from a strategic perspective (James, 2004). A lot of questions have been asked about how to maintain the knowledge within organization. So, the company can later implement that knowledge to drive itself against competitors. Knowledge storage and retrieval process is one of the most important processes in Knowledge management. Since it can help organization store the current knowledge and retrieve it to make new knowledge in the future. In the past, Knowledge has been maintained within the organization through employees and documents. When employees leave the company, they are likely to take way years of experience and valuable knowledge that could be priceless for the organization (Du Plessis, 2005; Hofer-Alfeis, 2008) Nowadays, technology making it easier for organization to maintain, retrieve and share it 24/7. Information technologies are tools that help to assist the management and employees in the organization disseminate the big amounts of information and make it useful for the organization. Over the decades, information technologies has provided useful helps for executives in form of Decision Support System (DSS). Moreover, Executives Information System (EIS) provides necessary information to manager to manage daily tasks. These system can facilitate individual and organizational improvements within organization. Currently, there are a lot of systems that help facilitate organization to store and retrieve information needed. These system also help creating, organizing knowledge within the organization.

For the past decades, many organizations have been implementing information technologies (e.g. internet, intranet, extranet, wikis, blogs, enterprise software) to enhance the efficiency of storage and retrieval processes within the

organization. These new technologies are not only increase the effectiveness in communication among department, it can also allow employees to store and receive information easier. Employees now can share information 24/7. Company can be sure that the knowledge that once belongs to employee's expertise will not be lost when they resigned. Or the knowledge that used to be written in the document forms will no longer difficult to find. With the new technologies, employees can now have ability to communicate among each other more. The personnel communication barriers will be eliminated. As a result, they can implement new ideas to create new strategies which make benefits for the company in the future. For example, more communication in the organization can facilitate employees to share new ideas about strengths and weaknesses including what should be improved in the department. These ideas can also be shared among other department through E-mail, Wikis and other technologies tools. If the ideas are interesting, employees can send e-mail directly to the management to consider it. If the ideas is approved, it can be stored in the system. When new employees come to the company, they can retrieve information about it and transfer to other persons.

Information technologies not only help enhance the performance of the company, it also helps the company to response to customers faster which will increase customer satisfaction. When customer perceives that the company can fulfill their needs or even beyond their expectation, their perception towards the company will be positive. This positive perception will lead to the decision to buy in the future. As a result, it can lead to the increasing in sales and profits. In order to make a clearer picture of organization that implements information technology to facilitate the knowledge storage and retrieval processes, The Siam United Steel (1995) Co., Ltd. has been selected to provide an example of Thai company that has been implementing this process to react with its customer perception towards this process. This paper therefore attempts to highlight on the process of knowledge storage and retrieval processes of Marketing and Customer Service department (MCS) which is one department under Marketing Division of the company and its customer perceptions of the process.

1.2 Problem Statement

Knowledge Management is considered as one of the most crucial success factors of organizations to compete with others in the business world today. One of the knowledge management processes is knowledge storage and retrieval processes which can help organizations maintain the knowledge and retrieve it anytime they want. This knowledge will finally lead to make good perception towards customers. Thus, it will create benefits for them in the future.

In order to analyze knowledge storage and retrieval processes, the current system of the processes within the company needs to be studied. Moreover, customer perceptions towards the current system also need to be studied to reflect the perceptions of customers towards these processes in customer point of view.

This paper has gathered theories that involve the knowledge storage and retrieval processes in order to answer questions for the company about the perception of customers towards the knowledge storage and retrieval processes.

1.3 Research Objectives

The objectives of research are as follows:

1.3.1 To study the knowledge storage and retrieval processes within Marketing and Customer Service department of The Siam United Steel (1995) Co., Ltd.

1.3.2 To study customer perception towards knowledge storage and retrieval processes within Marketing and Customer Service department of The Siam United Steel (1995) Co., Ltd.

1.3.3 To provide the overview and analysis of knowledge storage and retrieval processes within Marketing and Customer Service department of The Siam United Steel (1995) Co., Ltd.

1.3.4 To provide further recommendation for the existing processes.

1.4 Scope of study

This research will focus on the Marketing and Customer Service Department (MCS) which act as a technical support engineers to provide technical consultant and recommendation of the products for customers. They also solve customer's problems in term of the quality of the product and defect that may occur in each case. MCS needs to cooperate with factory plant and sales officer in marketing department and make the judgment for the claim and return of products.



CHAPTER II

LITERATURE REVIEW

According to the research topic, there are two frameworks that involve in this topic. The first framework is knowledge storage and retrieval processes. The other one is customer perception theory. Each theory will be described as follow;

2.1 Knowledge Management Process: Knowledge storage and retrieval processes

2.1.1 Definition of Knowledge Management

In order to survive in a competitive and changing business environment, organization needs to develop knowledge to align with other strategies. Nowadays, Knowledge management (KM) plays an important role in organization around the world. Many organizations are finding ways to facilitate sharing and integration of knowledge. KM is the process of managing the intellectual capital within organization (Silvi & Cuganesan, 2006, p. 310). Alavi and Leidner (2001) defined KM as “identifying and leveraging the collective knowledge in an organization to help the organization compete. KM is defined as “the process for effectively applying intellectual capital (human, social, and organizational) to enable faster, better organizational decisions” (Pollock, 2002).

There are 4 four components of KM which includes; Knowledge creation, Knowledge storage/retrieval, Knowledge Transfer and Knowledge application. However, this paper will focus on Knowledge storage/retrieval.



Figure 2.1: Knowledge Management Framework (Rowly & Hon-fun Poon, 2004)

2.1.2 Knowledge storage and retrieval processes

Fulmer (2011) stated that the storage and retrieval processes within the organization are often referring to organizational memory. Alavi & Leidner (2001) also includes “memory residing in various component forms, including written documentation, structured information stored in electronic databases, codified human knowledge stored in expert systems, documented organizational procedures and processes and tacit knowledge acquired by individuals and networks of individuals”. Effective IT systems can enhance the organizational memory. These systems increase the speed that the organizational memory can be accessed. (Alavi & Leidner, 2001) IT systems that facilitate organizational memory include storage technology, database management systems and query languages. These tools are able to increase the speed at which organizational memory can be accessed and help prevent organizational memory loss. As a result, in order to implement storage and retrieval processes within the organization, IT plays an important part in facilitating the whole process and serve as intermediaries between users and information.

2.1.3 Information Technologies for knowledge storage and retrieval processes

There are two different approaches to KM for which IT can provide support: codification and personalization (Hansen et al. 1999). With the codification approach, more explicit and structured knowledge is codified and stored in knowledge bases. The main role of IT here is to help people share knowledge through common storage so as to achieve economic reuse of knowledge. An example of such IT tools is electronic knowledge repositories. With the personalization approach, more tacit and unstructured knowledge is shared largely through direct personal communication. The main role of IT here is to help people locate each other and communicate so as to achieve complex knowledge transfer. Examples of such IT tools are knowledge expert directories and video-conferencing tools. Both these KM approaches are fundamental to understanding the role of IT in KM roles of information technology.

Mcafee (2005) has categorized IT into three categories as the following figure;

Table 2.1: the three categories of IT (Mcafee, 2005)

IT Category	Definition	Characteristics	Examples
Function IT	IT that assists with the execution of discrete tasks	-Can be adopted without complements -Impact increases when complements are in place	Simulators, spreadsheets, computer-aided design, and statistical software
Network IT	IT that facilitates interactions without specifying their parameters	-Doesn't impose complements but lets them emerge over time -Doesn't specify tasks or sequences -Accepts data in many formats -Use is optional	E-mail, instant messaging, wikis, blogs, and mashups

Enterprise IT	IT that specifies business processes	<ul style="list-style-type: none"> -Imposes complements throughout the organization -Defines tasks and sequences -Mandates data formats -Use is mandatory 	Software for enterprise resource planning, customer resource management, and supply chain management
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Across the three IT categories, executives have three tasks. First, they must help select IT applications that will deliver the organizational capabilities they desire. Second they must lead adoption efforts that result in the creation of complements for those technologies, and third, they must shape the exploitation of IT by ensuring that technologies, capabilities and complements stay aligned, McAfee (2005).

Markus (2001) presents a “Theory of Knowledge Reuse” in which the information system that supports the knowledge management initiative handles both access to expertise and access to the experts. This allows for optimally managing both the explicit knowledge of the organization (the knowledge that is captured in the system as expertise), as well as the tacit knowledge of the organization (which resides within the individual experts). While this research focuses primarily on explicit knowledge that has been captured and codified, its implications extend beyond expertise and apply to knowledge management of experts as well. In developing her theory of knowledge reuse Markus (2001) argues that information technology plays an intermediary role in knowledge management. Specifically, she emphasizes the creation and utilization of the repository. This study reflexed that emphasis and suggests that by re-evaluating the underlying infrastructure of the repository, the effectiveness of the information retrieval process may be increased.

Information Technology (IT) which includes storage technology, database management systems and query languages is very good at “organizing, storing, manipulating, and facilitating the query and retrieval of data and documents” but it does not enable knowledge flows (Nissen, 2006, p. 51). In order to enable knowledge flows, IT needs “to be placed in context and used to enable direct action to become knowledge” (Nissen, 2006, p. 51). IT is an aid that can “systematize, enhance, and expedite large

scale intra and inter-firm knowledge management” (Alavi & Leidner, 2001, p. 108). KM projects require IT, processes and people, with the latter being the most important. Many KM projects have failed because of over-reliance on IT. People are still required to read and understand documents and perform the majority of workflows requiring knowledge, particularly “those involving experience, judgment and like capabilities dependent on tacit knowledge” (Nissen, 2006, 50). IT plays an important supportive role, but it is the people in an organization who perform the majority of workflows.

2.2 Customer Perception framework

Customer perception is one of the important factors that make business successful. As the success of the organization is based on the ability to attract and maintain customer to buy its products and services. .

Zeithaml (1998) stated that Customers’ perception is enhanced with increasing levels of quality they perceived and lowered with increasing levels of sacrifice they feel. Perception is a special interpretation that one gives to objects or searches or otherwise brought to the attention of the consumer through the senses (Walters, 1989). Perception is defined as the special interpretation that individual pays attention to objects or ideas searched or brought to the consumer’s sensory (Walters, 1989). Middleton & Clarke (2001) defined that perception is a kind of explanation how individuals choose and organize various information they are going to expose and perception is a set of attitude, motivations, experience and learning, particularly correlated with a previous purchase. Perception is a series of progress of people choose, form, and interpret information to gain an understandable picture of the world (Kotler, 2004).

Perception can be identified as the progress of an individual chooses, arranges, and interprets stimuli to be meaningful and logical frame of the world (Schiffman & Kanuk, 2004). In addition to that, Solomon and Stuart (2005) stated that three basic aspects of consumer’s perception are exposure, perceptive selection and interpretation. This means that firstly, customers perceived about products to their sensory from some stimuli simultaneously.

On the other hand, customer perception is the perspective of customers towards the company and its products and services. As a result, it is clear that customer behavior can be influenced by customer perception. Thus, customer perception will affect sales which lead to the profits of the company. For this reason, many company invested a large amount of resources to influence a good image toward customer perception.

There are many factors that facilitate the business to be success. Neilson (2012) concluded that key success factors for business includes employee attitudes drive growth and change, technology utilization, financial success factors, global footprint and marketing consistency. However, knowledge storage and retrieval processes can be one of important factors that reflex the effectiveness of managing knowledge within organization. These processes will lead to a good perspective of the company towards customer perception. The good perception towards the company might be able to make customers buy the products of the company.

The aforementioned explanation can be summarized as the following figure:



Figure 2.2: 3 steps of Knowledge storage and retrieval processes through customer perception

Source: Developed by author

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology used in this paper is described in this section. The location where the study was conducted, the study design and sample are described. This research involves formulating open ended questions to be investigated, selecting, choosing and applying appropriate procedures for data collection through in-depth interview. This paper utilized data based on primary and secondary data. Primary data involves the interview of executives, staffs and customers of The Siam United Steel (1995) Co.,Ltd. Secondary data involves this paper in terms of storage and retrieval process of information within the company.

3.2 Data Collection Method

Hair et al (2007) stated that there are two methods of primary data collection which can be divided into Qualitative and Quantitative. This paper implements Qualitative method to collect the primary data. In order to answer the research question, in-depth interview and non-participant observation (During a company visit) techniques are adopted as the data collection approaches because this method can demonstrate a clearer picture of storage and retrieval processes within the company. On the other hand, customer of the company has been interviewed to reflect the customer perception through the storage and retrieval processes of company.

Open ended questions are developed because it helped interviewees provide examples and opinions towards the interview. Some questions are provided below:

- What is knowledge in your understanding?
- Do you think there is knowledge in your organization?
- Please identify the knowledge that you receive from this function

- Do you think IT can help facilitate your work? In which process? Please give examples
- What do you think customer feels towards this process?
- Do you think this process can help increasing profits to the organization? And how?

Reflective note taking is also used to record observed data as it help the author to categorize the information given by interviewees. Moreover, it helps to provide detail and idea of interviewees during the interview. Additional information was collected from the company's website and internal documents.

3.3 Demographic Data

The sample is convenient as interviewees are 6 persons consists of 1 managers, 3 employees, 2 customers.

List of participants during the interview;

1. Mr. Sakchai Chongsirilert, Senior manager of Marketing and Customer Service Department of Siam United Steel (1995) Co., Ltd.
2. Mr. Chalermkiat Ketkon, Supervisory Officer of Marketing and Customer Service Department of Siam United Steel (1995) Co., Ltd.
3. Mr. Sukit Chanchareonrit, Assistant Manager of Siam United Steel (1995) Co., Ltd.
4. Mr. Krip Jarupravit, Senior Sales Executive Nippon Steel Trading Co., Ltd.
5. Ms. Kangsadal Paotawee, Marketing Officer of Bangkok Pacific Steel Co.,Ltd. (customer of Siam United Steel (1995) Co., Ltd.)
6. Mr. Surasak Jeardsuporn, System Engineer of Siam United Steel (1995) Co., Ltd.

3.4 Interview process

The Siam United Steel (1995) Co., Ltd. has been selected to be the example of Thai Company that has been implementing the storage and retrieval processes. Customers of this accompany also interviewed to provide opinions and responses of their perception towards this processes. The interview was conducted in November, 2013, each interviewee was interviewed about 30 minutes with main 7 questions.

3.5 Data Discussion

3.5.1 Company Profile

The Siam United Steel (1995) Co.,Ltd. was established on July 27, 1995 with the registered capital of 9,000 million Baht with the corporation of Nippon Steel, POSCO and The Siam Cement Group. The main products of the company can be classified into 3 categories;

1. Cold Rolled Sheet (CRS) for general use such as automotive parts, electrical appliances, steel furniture, pipe, drum etc.
2. Galvanized Iron Substrate (GIS) base material for making galvanized sheet for construction.
3. Tin Mill Black Plate (TMBP) base materials for tin plate and tin free steel.

Currently the company got around 840 employees. The main factory plant is located in Mab Ta Put industrial estate in Rayong Province. The marketing department located on Ample tower building in Bangna Trad Road, Bangkok.

Main customers of the company will be factories industrial estate that require cold rolled steel as a material to produce their products such as Automobile makers (Toyota, Honda, Nissan etc.) Electrical Appliances (Sharp, Toshiba, Panasonic etc.)

Organization Chart

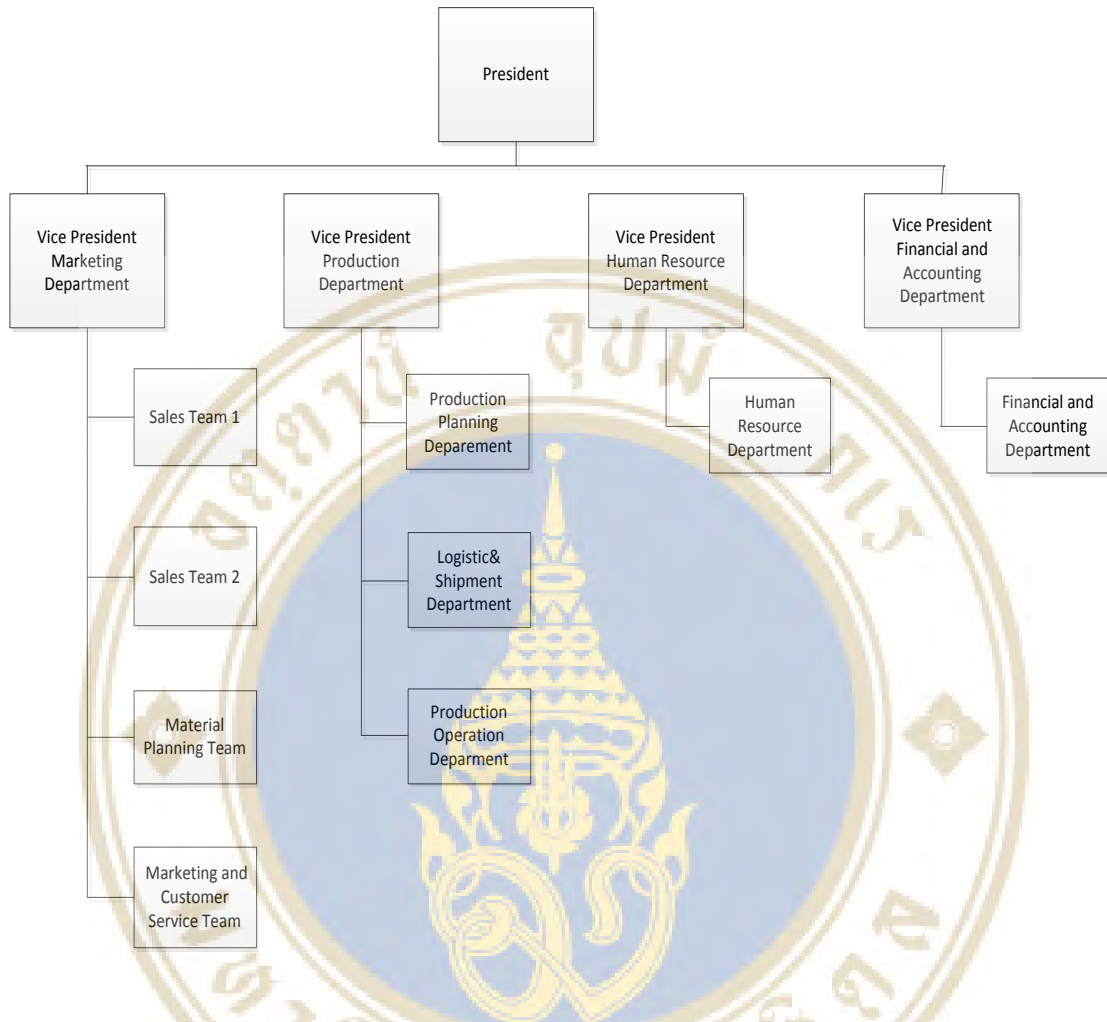


Figure 3.1: Organizational chart, The Siam United Steel (1995) Co.,Ltd.

From the figure, there are 4 main departments within the company; Marketing, production, human resource and finance and accounting. For marketing department, it consists of 4 subdivisions which are 2 sales team. The first team is responsible for the automobile-related and electrical appliances customer group, which most of them are Japanese companies located in diverse industrial estate. The second team is responsible for the Thai company customer that are not related with automobile and electrical appliances production. The third subdivision is material planning team which is responsible for material order and material planning for each sales team. The last subdivision is Marketing and Customer Service (MCS) which is responsible for

taking care of investigating material specification and material defect claim from customers.

High Level Process: Marketing and Customer Service Department Acquiring new customers

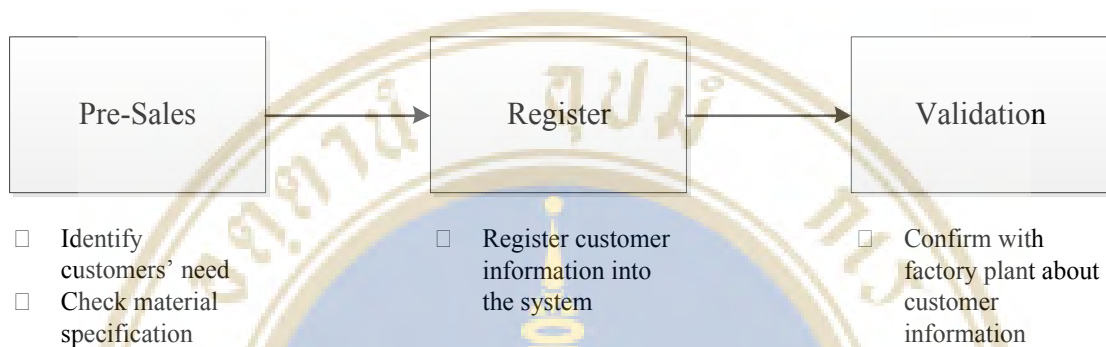


Figure 3.2: High Level Process (New customers), Marketing and Customer Service Department

In this process, MCS will first work with sales officer to identify customer needs and check the material specification based on the requirement of customers. After MCS verify that the material is available for customers and sales officer finish negotiating terms and conditions including the price, MCS will register customer's information into the system. After that they will validate customer with the factory plant by confirming the customer information with the factory plant through the system.

Technical Support (For existing customers)

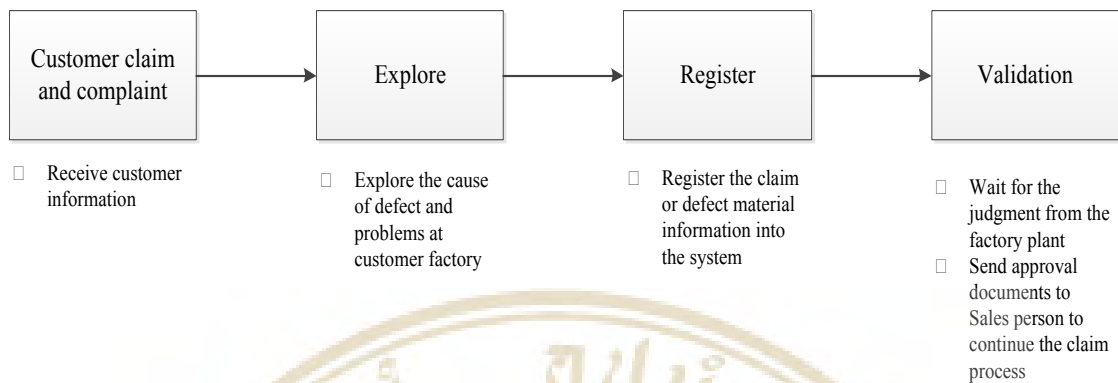


Figure 3.3: High Level Process (existing customers), Marketing and Customer Service Department

In this process, MCS will first receive customer claim information which will be informed through sales officers or customer directly contact MCS officers. After MCS got the claim information from customer, they will explore the cause of problem by investigating material samples of customer or go to customer site to investigate other evidences. If MCS verify that the defect caused by the material from SUS side, they will register the claim defect and material information into the system (along with customer profile that has been recorded earlier in the stage of acquiring new customers). Then they will send this information to the factory plant to investigate the problem and verify the claim. If the factory plant verify the claim, MCS will send verified claim document to sales officer to continue the compensation to customers.

CHAPTER IV

DATA ANALYSIS AND FINDING

4.1 Data Analysis

During the interview, all of the interviewee agreed that knowledge is one of the most important factor in the organization today. The result of the interview have shown that knowledge is something that can be learned and utilized within organization. It may come from many sources. For example, when one employee came to work in this company, he may know nothing about the company's products and services. He then learnt about it through the handbook of the company and On the Job training. Moreover, he learnt some knowledge of the company through customer visit. These activities allowed him to be able to know more about the company processes and customer requirement. By visiting customers, he will receive information from customer perspective, this information will allow him to know more about what company should develop to satisfy customer need. Strengths and weaknesses of the company. He can make use of this information to negotiate for the best interest of the company. Moreover, in this company the knowledge can be transferred to the other person by asking. New employees always ask something that they didn't know to their mentor by asking questions. Then they will later adapt new information that they have received into their own knowledge. In this case, there is information which has been transform into knowledge. There are differences between information and knowledge, which is Maglitta (1996) pointed out that data is raw numbers and facts, but information is the processed data, and knowledge is information that has been made actionable. While, Vance (1997) concluded that information is the process of data interpreted into a meaningful framework whereas knowledge is information that has been authenticated and thought to be true. From these concepts, it can be inferred that organization seeks for the effective processes that help transforming information within the organization into knowledge. That knowledge should be stored and can be retrieved any time they want. This knowledge will facilitate work processes and help the company gain competitive advantages over competitors. For example, company make use of its

customer information and implement strategies that achieve customer satisfaction. These strategies will be able to increase customer loyalty and attract them to buy more in the future.

The company also supports employees to gain new knowledge. For example, they always send employees to seminars for team building, exhibitions and courses that are useful such as new techniques about Excel spreadsheet programs. This new knowledge can be useful for the company in the future. This idea reflected some ideas of employees about knowledge which comply with Knowledge Management definition of Silvi & Cuganesan (2006) that define KM as the process of managing intellectual capital within an organization. In this case, the intellectual capital of the Marketing and Customer Services Department of the Siam United Steel (1995) Co., Ltd. is information about customers. For example, MCS officers will work closely with sales officers and customers to make sure that all products and materials are compliant with customer requirements. MCS officers will know the details of customers and materials that they used through discussions and visits which take some time. Moreover, each customer has different contact points and different processes. Once MCS officers and sales officers take some time to learn more about a customer, next time, it will be easier for them to reach the same customers. As a result, customer information and work processes are considered to be intellectual capital within this company.

On the other hand, the interview results from the trading company and customers of the company have shown that the ability to manage the conflict between suppliers and customers is one of the important factors that attract customers to stay with the company. In a customer's perspective, MCS should be able to provide the right information to customers to solve the problems that may occur in each case. Information should be transferred not only for the MCS department but other departments such as sales, production, and material planning should share this information in order to serve the requirements of customers. As each customer has different requirements and material specifications, to make them satisfied requires a corporation and information sharing from every department within the company.

The information from the interview also shows that in the Thailand cold-rolled steel industry, customers rarely change suppliers. If the company knew the way to approach them and make them satisfied, they tend to repurchase in the future. This idea can be described by the KM idea of Pollack (2002) that defines KM as the process for

effectively applying intellectual capital to enable faster, better organizational decision. In this case, knowledge about customer information and the way to approach them, make customers decide faster to buy company products compared with competitors.

For the storage and retrieval processes of the company, the interview results have shown that since the company was established they have been implemented SAP system. This system is the backbone of the company. Initially, the system was implemented based on Nippon Steel Company in Japan, which is the parent company of the Siam United Steel (1995) Co.,Ltd. After the installation and test processes, System engineers have been trained to learn about the system. After the training, system engineers would be able to modify some functions based on real work processes without the dependence from the parent company. This system links each department together. The system has been implemented in both plant; Marketing department in Bangkok and Factory plant in Rayong province. MCS and Sales officer can see each customer orders and products real time. Moreover, the company provided video conference room in both branches office. If there are any emergency issues or immediate meeting, they can arrange the meeting right away. This is the ease of communication. Factory plant and marketing department can share information easier. For MCS department, officers always use this system to reach customer's information. He explained that the system has been utilized to record customer information. The company has a lot of customers which use different product and different specification. Steel chemical composition is quite complex. If the company cannot distinguish the type of material that customers use in the past, they will not be able to decide which material customer should use for their new project. If the company cannot do that, other companies will do it. Which means customers will be gone. The SAP system of the company that MCS department normally use can be divided into 2 processes. The first process is acquiring new customers. This process involves 3 parties, customer, MCS officer and specification engineers at the factory plant. Firstly, when customer inform new requirement, MCS officer will go out and visit customer plant and gathering information about their plant, machine and material will be used including material specification and material samples. After that, MCS officer will consult with the factory plant whether SUS can produce the material according to customer requirement or not. If SUS cannot produce material according to customer's requirement, they will inform customer and wait for the new requirement. On the contrary, if the material match with SUS production

capacity, MCS officer will fill out the approval form to register customer into the system and wait for the approval from MCS manager. After MCS manager approve, the document will be sent to factory plant for the approval again. If both manager approve, MCS will register customer's information into the system. If the requirement will not be able to approve by managers, MCS will inform customer.

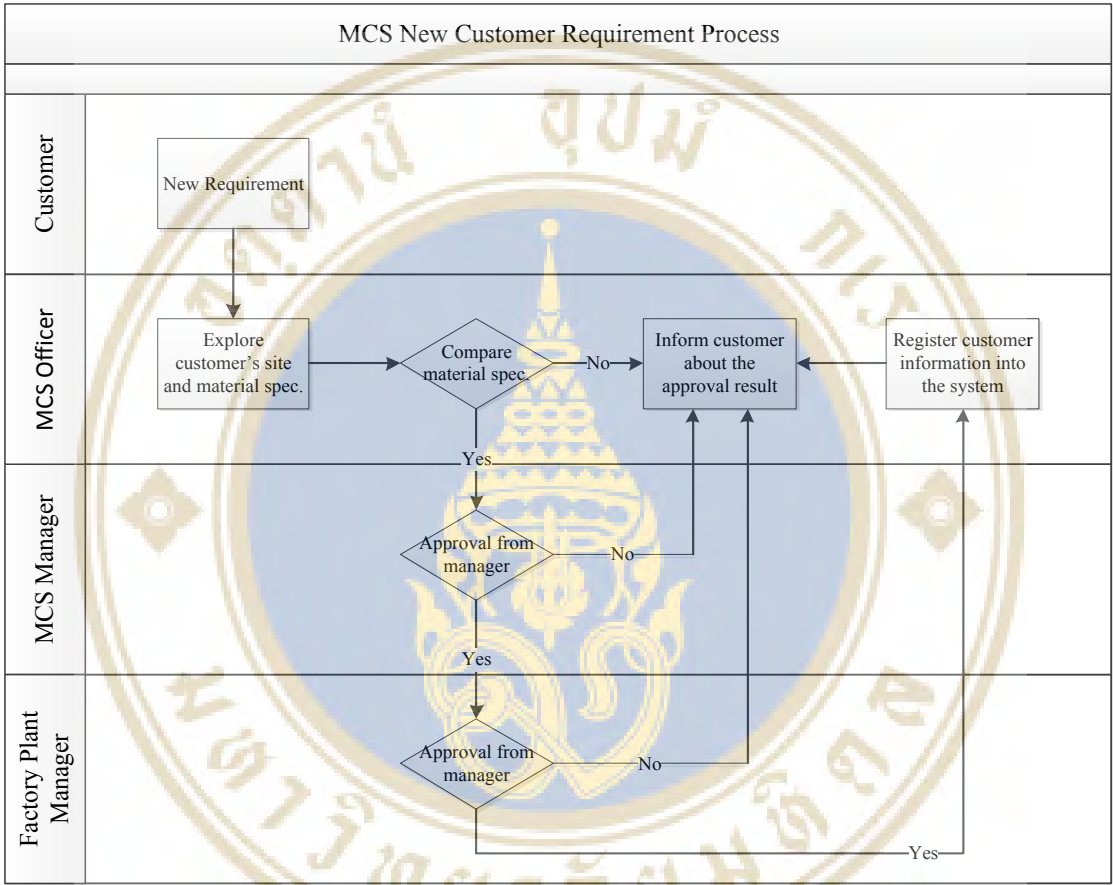


Figure 4.1: MCS acquiring new customer process

The second process is about the claim and compensation of the defected products. In this process, MCS officer and sales officer will be corporate and gather information then identify cause of the problem. MCS officer will check customer's information from the SAP system about the material that causes the problem whether in the past there is any record of the defect or not. Then they will check the usage and application that design for each material. Then they will go out and explore the cause of the defect at customer's site. If the material has been used for other purpose which customers didn't declare in the first place, the company will not responsible for any

defect may occur. For example, customer informed that the usage application for material is automobile door, but they use the material to produce electrical appliances. After they use the material, the material was cracked and they inform SUS that it is the defect from material. In this case, the claim is not verified because the usage of material has been abused. Each material was design for different usage and purposes. As a result, the company will not responsible for any defect. After exploring customers' site, MCS officer will investigate the material defect along with factory plant to find the cause of defects. After that MCS officer will send document to Manager to approve. Then send to the factory plant for approval again. In each process, if customer is not approved by managers, MCS officer will inform customer. If the case has been approved by all of the manger, MCS officer will register the claim information into the SAP system and send the approval document to Sales office. MCS officer will only gather information and justify the validity of each claim. Then sales officer will negotiate and manage the compensation with customer.

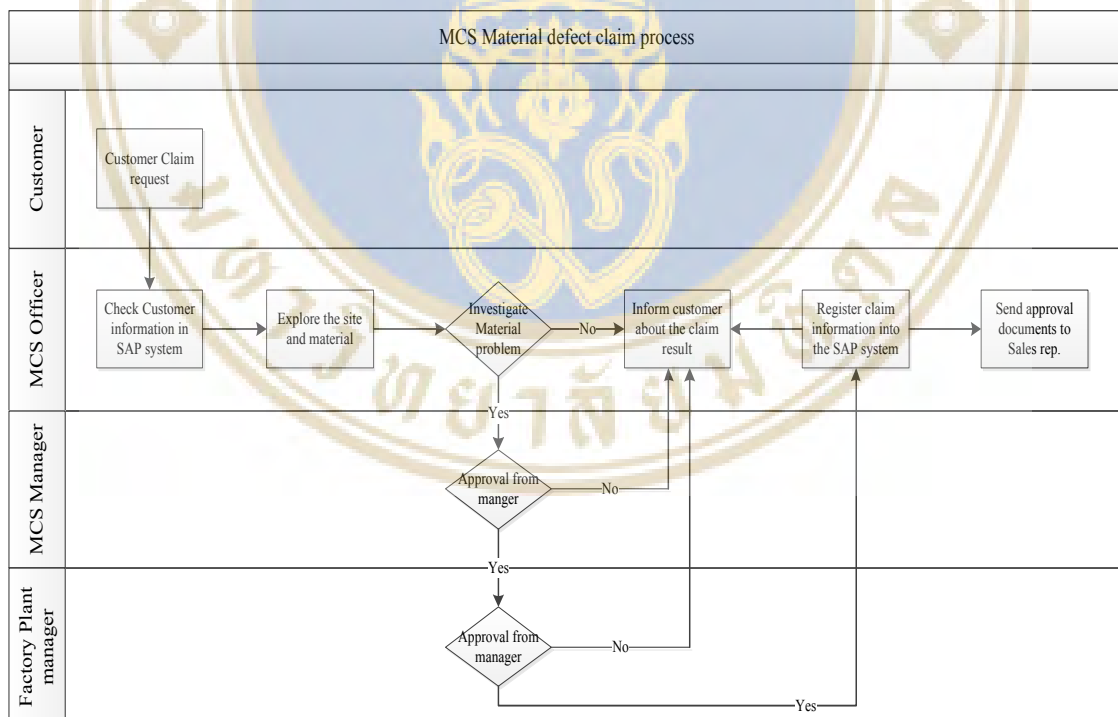


Figure 4.2: MCS material defect claim process

These processes show the linkage between the storage processes within the company which refer to the process that MCS fill out customer information within the SAP system.

For the retrieval process, the good example is MCS has compared the customer information which provides the declared specification and usage. These processes can be linked with Fulmer (2011) that imply the storage and retrieval of knowledge within the organization which often referring to organizational memory. These processes can also be explained by Alavi & Leidner (2001) that includes memory residing in various component forms, including written documentation, structured information stored in electronic databases, codified human knowledge stored in expert systems, documented organizational procedures and processes. They also suggested that effective IT systems can enhance the organizational memory which increases the speed that the organizational memory can be accessed.

SAP system of the Siam United Steel (1995) Co.,Ltd. that MCS department has been implement to store and retrieve customer information can be classified as Enterprise IT. Based on McAfee (2005) article about three categories of IT.

For the customer perception in this process, interview has been conducted in the customer side. The result of the interview showed in cold-rolled steel business, the quality of material is very important. Supplier is now corporate with the company in designing new material to customers. As higher competition, customers need lighter and stronger material with less cost. MCS need to design which material is suitable for customer. For the knowledge storage and retrieval processes of SUS, customers always compare this process to other companies in the same industry, SUS considered to be one of the best in term of services. For example, in case of the defect of material. Once customers called to the company about the defect and tell them the purchase order number MCS can quick track and prepare information then make an appointment with them to clarify the problem. This guarantee system has helped her to make sure that someone will responsible for the defect may occur from the material.

However, information from customer has pointed out that even though, MCS department can response customer quite fast, customers have to wait for a long time in some cases. For example, there was one case that the MCS engineers concluded that the material defect caused by the material imported from Japan which need further investigation. In this case, they have to wait more than 3 month to get the claim judgment

and compensation for defected material. In customer perspective, this process require a lot of approval both from manager from the marketing department and manager from factory plant. So, it took a long time. Information from the interview also pointed out that customers felt that with the knowledge storage and retrieval process that has been implemented within the company, the company could have done it faster. If MCS department can response to customer claim faster, they tend to purpose new project to SUS more, instead of allocating material portion to other suppliers to share risk of material defects. In steel business, the quality of raw material is very important because steel will be transformed into many things including automobile parts and electrical appliances. Most of the factories that produce these parts will guarantee the quality of its part to their customers. This is the same thing as SUS guarantee that material for their customers. If there are claim incident happen and SUS response slowly, customer will not be satisfy as they consider the defects as their sunk cost. In the future, if there are more claims and the former claim request has not been clarified and compensated, customer will tend to switch supplier. On the contrary, if the claim is clarified and compensated logically, when there will be new projects, customer will think about SUS as a first priority supplier. As they satisfy and trust the company which will be able to solve their problems, they would like to work with SUS in the future.

4.2 Limitation and Further study

Since this research has been conducted under the short period of time, it has some limitation. The first limitation involves the number of interviewees. Most of them are executives and staffs of the company. Two customers have been interviewed. However, 2 sample sizes are not enough to conclude that all customers perceived about the process of the company in the same way as the sample sizes have responded. Moreover, the interview result of one company cannot defy the result of knowledge storage and retrieval processes with all Thai company. As a result, the further study should be conducted with more number of samplings and discussions. Moreover, further research should have been conducted to explain the relevance of knowledge storage and retrieval processes and customer perception in other type of Thai industry. It also need

to provide a better idea about how good customer perception affect company in terms of tangible and intangible benefits.



CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The Siam United Steel (1995) Co.,Ltd. (SUS) is the company that has been implementing SAP software to facilitate the knowledge storage and retrieval process within the company. The knowledge of this company can be described as customer's information and specification of material that they have been purchased in the past. These information can help SUS including the Marketing and Customer Service department (MCS) make the decision faster and help them implement strategies to increase customer satisfaction based on this information. They believe that when customers satisfy with their products and services, customers tend to stick with them and repurchase their material in the future. Moreover, when the new project which includes the new requirement of material, customers will think of SUS as the first priority supplier to supply material for them. The knowledge within the company is not only shared within the marketing division, but also has been shared to the factory plant in Rayong province. With the system that help the company integrate information from both sides, the knowledge can be shared effectively. The company also have policy to improve the human capital by sending employees to train new skills outside the company. This policy includes seminar and other course training which will help the company extract the knowledge from its employees and develop work process which will improve their competitive advantages in the future.

In customer perspective, they believe that the process of knowledge storage and retrieval within SUS help facilitating order and the claim process in case of material defects with the right information. However, there are a lot of processes in defect material claim which includes exploration, material investigation and approval from managers both from marketing department and factory plant. These processes make customers wait for a long time in order to get the judgment and compensation from the company. Customers also believe that the with the knowledge storage and retrieval processes within the company, the company should be able to response customers faster.

If MCS can response to customer faster, it will be able to increase customer satisfaction and create good brand image for the company which will make customers want to come back to work with SUS again. When there is new project, customers will think about SUS first. Moreover, a good reputation and brand image will attract new customers to work with SUS which can lead to higher sales and higher profits of the company in the future.

5.2 Recommendation

5.2.1 Improve defect claim process

MCS department has been implemented SAP system to share information among staffs, factory plant and customers about customer information and material specification. However, their claim process for the material defects require many approval processes. This process decrease customer satisfaction as they have to wait for a long time. They also had problems about the inconsistency of supply chain. As material get defected, the whole operation will be stopped to investigate the problem. Customers considered this incident as the loss of operation and opportunity cost. The faster that material judgment from SUS, the less cost of operation they will get. In order to make customer satisfied and do a long term business with the company, the process should be adjusted to shorten the time of the claim process. The recommended process that help to shorten the claim process will be explained as the follow figure:

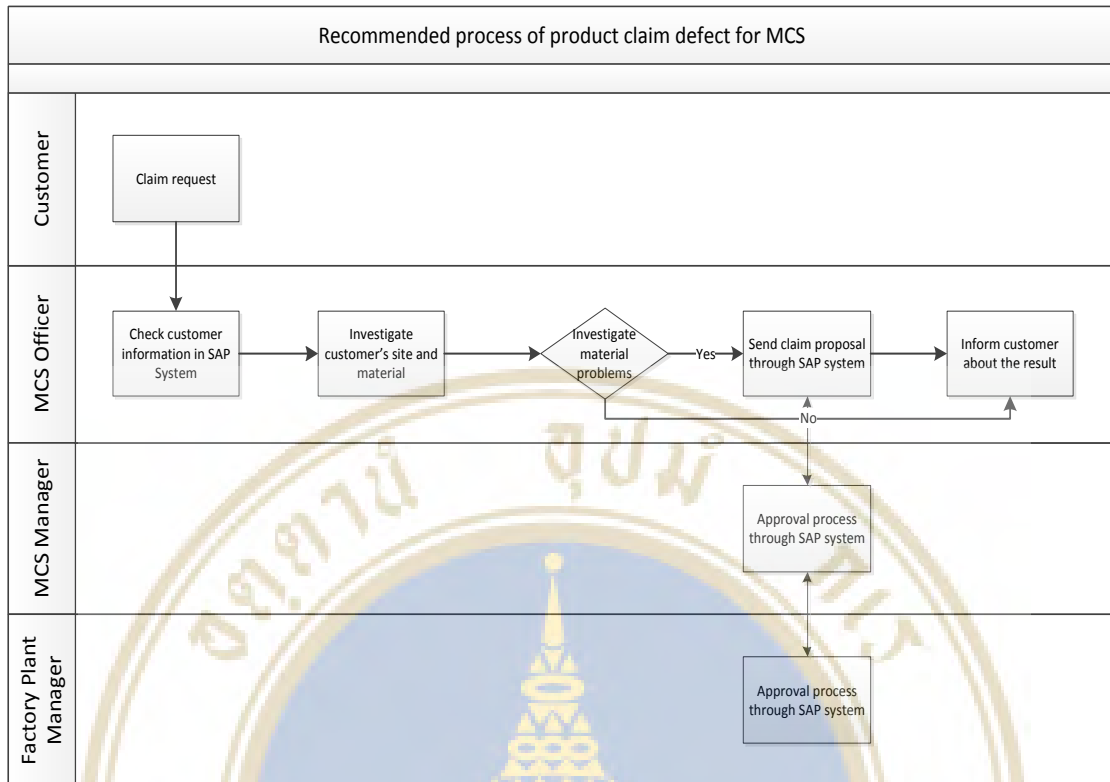


Figure 5.1: Recommended process of product defect claim for MCS

According to the figure, for the new process, customer will first inform about the claim and then MCS officer will check the record of material specification and application usage through the SAP system. After that MCS will go to customer site to explore the cause of defect and collect the defect samples of material. Then they will work with the factory plant to investigate the cause of defect of material. If the cause of defect is from SUS, MCS officer will register the new claim into the system and wait for both MCS manager and factory plant manager to approve through the SAP system. Once the claim is approved, MCS officer can retrieve information through the system and inform customer. Then sales officer will be informed through the SAP system about the new approved claim for further negotiation and compensate. This new work process will help shorten the time in approval each claim issue. Since SUS has been implemented SAP already and their system engineers are able to adjust the functions of the system based on users' requirement, they should adjust it to be interactive. Managers and officers can communicate and explore the same information. The new adjusted system will allow MCS department and SUS to reduce the unnecessary paperwork and

approval time. This new process will be able to satisfy customers and make a good perception towards storage and retrieval processes of the company.





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