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Corporate Mission and Vision and Customer Knowledge Management for Increasing Competitive Advantages

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ABSTRACT

Customer knowledge is highly valued in today's business environment where supply is more than demand and firms are trying their best to differentiate themselves from their competitors. Building customer knowledge base through knowledge management provides firms with strategic weapon for customer value creation, average level of customer knowledge enhancement, cost and time reduction, service quality improvement and quicker customer knowledge creation. The main objective of this study is to propose a conceptual framework for exploring the relatedness of the three dimensions: resource provision, knowledge management process and customer knowledge performance. The proposed conceptual framework emphasizes the link between knowledge management with corporate mission and vision and that they set out the direction of corporate knowledge management. This study takes a kitchenware manufacturer and seller in Taiwan as an example to perform a field study to collect the concerned data for exploring the expressed relatedness among the three dimensions of the proposed framework as reported by the respondents in the case company. From the responses of the surveyed case company, it is also demonstrated how customer knowledge can be enhanced through resource provision and knowledge management and that people who surely understand their corporate mission and vision can outperform in knowledge management process and in customer knowledge performance compared with people who do not in this particular setting.

Keywords: customer knowledge, knowledge management, competitive advantages, vision, mission.

1. INTRODUCTION

The focus of global economics has shifted from labor-intensive or capital-intensive industries to technology-intensive and knowledge-intensive industries. Davenport and Prusak (1998) point out that knowledge has become the major asset of modern businesses and the key to retain their competitiveness. Nonaka (1991) also stresses that in the future in which the only thing that can be certain is high uncertainty, knowledge is a certain and sustainable source of competitive advantages. Platt, the CEO of HP, also indicates that if HP can know exactly what knowledge it has owned, its profit can be increased to three times of its current level (Davenport and Prusak, 1998). Therefore, corporate knowledge management has become a very important issue for modern businesses to retain and strengthen competitiveness in the era of knowledge economics.

Among all the knowledge that needs to be managed, customer knowledge is highly valued in today's business environment where supply is more than demand and firms are trying their best to differentiate themselves from their competitors. Building customer knowledge base through knowledge management provides firms with strategic weapon for customer value creation, average level of customer knowledge enhancement, cost and time reduction, service quality improvement and quicker customer knowledge creation.

Under severe global competition, ways of retaining and strengthening competitiveness in the era of knowledge economics by means of building customer knowledge base through corporate knowledge management need further investigation. A conceptual framework for managing customer knowledge and a case study that intend to investigate how this can be done is thus provided. This paper will proceed as follows: section 2 will discuss the background of the research; section 3 will present the research design and method; section 4 will provide the research findings, followed by section 5 to further discuss them; section 6 will summarize the paper.

2. BACKGROUND TO THE RESEARCH

Corporate vision refers to the desired future state of a business (Parikh and Neubauer, 1993; Schoemaker, 1992). Corporate mission refers to its purpose, why it exists, core competencies and who benefits from its operation (Brien and Meadows, 2000). Clear mission and vision enable people in a business to have clear objectives, sense of direction, priority, holistic consideration, co-ordinated actions and the basis of performance measures. Corporate mission and vision also choose for a business its current problems and those in its future, for it recognizes them when its current state significantly deviates from its mission and vision.

Corporate mission and vision should guide and regulate corporate knowledge management at a corporate level. Arthur Andersen Business Consulting and APQC (1996) stress that corporate vision, value and strategy set out a direction for a business regarding its knowledge management. Therefore, without the linkage of corporate knowledge management with corporate mission and vision, corporate knowledge tends to be managed for its own sake.

2.1. The important resource provision for corporate knowledge management

From the survey of literature, this paper proposes two major resource inputs for successful corporate knowledge management: "incentives" and "organization and technology". These two resource inputs are detailed below.

1. Incentives: Knowledge is the source of power. A business cannot expect its employees to contribute their knowledge and share it with others without asking for rewards. A business should try to provide better treatment for those who contribute and share their knowledge than for those who do not. Stenmark (2001) also points out that knowledge sharing needs incentives and needs to make clear what rewards can be obtained.
2. Organization and technology: With delegated organization, delegated people will be responsible for the integration and co-ordination of inter-departmental knowledge management activities. Some well-known knowledge management case studies such as Arthur Andersen Business Consulting (Arthur Andersen Business Consulting and APQC, 1996) and Buckman Laboratories (Pan and Scarbrough, 1998) also set up delegated knowledge management departments. Regarding technology, related researches in the literature have clearly indicated that information technology alone cannot encourage the sharing of knowledge (Davenport, 1994, 1997; Cross and Baird, 2000). However, information technology and systems still play a very important instrumental role in the era of information and knowledge economics (Arthur Andersen Business Consulting and APQC, 1996; Davenport and Prusak, 1998).

2.2. Knowledge management process

Beckman (1997) points out that there are eight steps of a knowledge management process: Knowledge Define, Knowledge Capture, Knowledge Select, Knowledge Store, Knowledge Share, Knowledge Apply, Knowledge Create and Knowledge Sell. The "Define" function of knowledge management process is to identify the core competence of a business and the related knowledge categories, demands and requirements needed by the identified core competence. The "Capture" function is to capture from the internal and external source of knowledge the needed knowledge and to document it. The "Select" function is to select among the captured

knowledge that which is appropriate. The "Store" function is to properly codify and store the selected knowledge. The "Share" function is to disseminate and transfer knowledge. The "Apply" function is to use, integrate and reuse knowledge to carry out tasks and solve problems. The "Create" function is to create new knowledge and to uncover the existing knowledge. The "Sell" function is to use knowledge to provide new products and services in order to consolidate customers and market and to create competitive advantages. Beckman's (1997) knowledge management process adopted by this paper with modified presentation is shown in Figure 1 below.

2.3. The source of knowledge

After the survey of literature, this paper puts forward four sources of knowledge: artifacts, practices, regulation and system and networking. Artifacts are man-made creations such as products, architectures, blueprints, legal sentences and documents. Practices refer to how to accomplish a task. Brown (1991) indicates that knowledge does not necessarily exist merely in blueprints and technologies that are directly related to research and development of new products; local innovation that directly improves how people work onsite is also the creation of knowledge. Therefore, he continues, the opportunities for knowledge creation exist at all levels of a business and in its external customers. Nonaka (1991) also indicates that it is an important issue for corporate knowledge management to make tacit knowledge, such as how experts work, explicit and systematic through socialization, articulation, combination and internalization. Regulation and system, such as work procedures and formal and informal regulations, are the implementation of certain practices throughout a business and the codification of them if necessary and possible. Networking is regarded as a referring and problem-solving system composed of human networks. For instance, to know more about a problem related to production, one can ask people in the production department directly. One can also ask one's colleagues and they may refer him or her to the person they believe to know the problem best. Davenport and Prusak (1998) stress strongly that the key to successful problem-solving in a business is whether or not there is effective networking. Mintzberg (1973) also points out that managers spend more than 40% of their time on networking and communication; they acquire most of their important information through word of mouth, hearsay and gossip because they believe these will become the facts of tomorrow.

3. THE RESEARCH DESIGN AND METHOD

3.1. The research design

Understanding the importance of building customer knowledge base through knowledge management, this paper aims to propose a conceptual framework for

exploring the relatedness among the three dimensions of resource provision, knowledge management process and customer knowledge performance as shown in Figure 2 below. To take a strategic view of knowledge management, the identification of the mission and vision and of core competences is crucial for a business because it can then know what kind of knowledge can improve its core competences, achieve its mission and, in the long run, actualize its vision. Case study research and a structured questionnaire survey are adopted as the research method. A kitchenware manufacturer and seller in Taiwan is the focus of the research whose management, through the analysis of its mission and

vision, have considered the improvement of its customer knowledge will enhance its core competences. The structured questionnaire survey is adopted to collect the concerned data for analyzing the expressed relatedness among the three dimensions of the proposed conceptual framework as reported by the respondents in the case company. The collected data will also be utilized to further analyze how customer knowledge can be enhanced through resource provision, knowledge management process and customer knowledge performance in this particular setting.

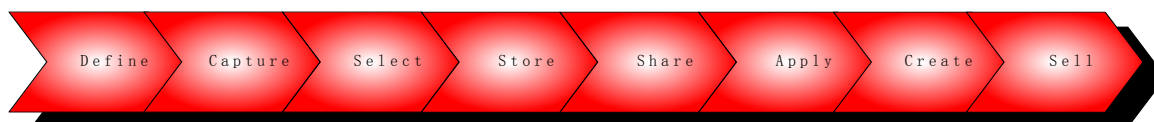


Figure 1: Corporate knowledge management process
Source: Adapted from Beckman (1997)

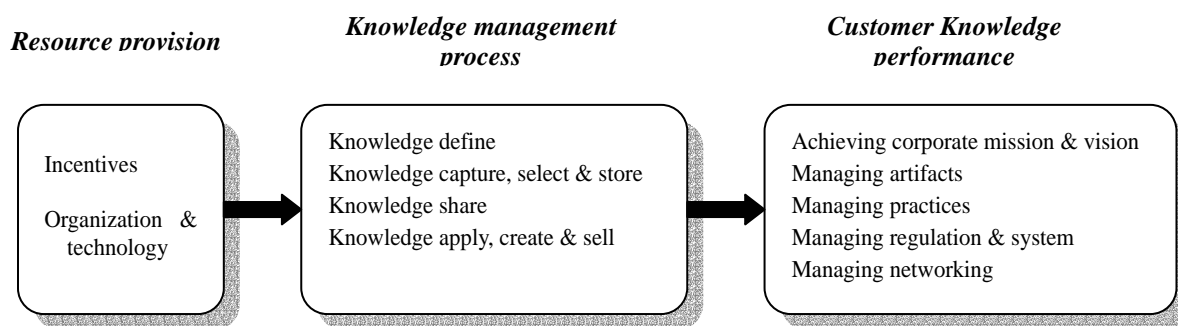


Figure 2: The proposed conceptual framework

For exploration of the dimension of resource provision, this paper proposes two major important resource inputs for successful corporate knowledge management including “Incentives” and “Organization and technology”, which have been mentioned above. For the exploration of the dimension of knowledge management process, this paper also adopts Beckman’s (1997) knowledge management process. The authors consulted senior managers of the case company and re-organized these eight steps into four steps, which would fit better their future planning for managing customer knowledge in their setting and could help them find out what step they should improve. These four steps were “Knowledge define”, “Knowledge capture, select and store”, “Knowledge share” and “Knowledge apply, create and sell”. For the exploration of the dimension of customer knowledge performance, this paper adopts the success of managing the four sources of knowledge - artifacts, practices, regulation and system and networking - as put forward by this paper above. Taking a strategic point of view of knowledge management process, this paper also adopts the success of achieving corporate mission and vision for the exploration of the dimension of customer knowledge performance. As mentioned above, clear corporate mission and vision enable people in a business to have clear objectives, sense of direction, priority, holistic consideration, coordinated actions and the basis of performance measures. They also set out the direction

of corporate knowledge management. Thus, it seems reasonable to assume that, under the clear guidance of corporate mission and vision, people who surely understand their corporate mission and vision can outperform in knowledge management process and in customer knowledge performance compared with people who do not. Based on the above, the objectives of the paper are to propose a framework which explores the relationship among the three dimensions of resources provision, knowledge management process and customer knowledge performance and show how the proposed framework can facilitate the enhancement of customer knowledge through resource provision and knowledge management process in this particular setting. The following hypotheses are also evolved:

- H1: Resource provision is positively associated with greater success of knowledge management process.
- H2: Knowledge management process is positively associated with greater customer knowledge performance.
- H3: Respondents who surely understand their corporate mission and vision achieve greater success of knowledge management process than respondents who do not.
- H4: Respondents who surely understand their corporate mission and vision achieve greater success of customer knowledge performance than respondents who do not.

3.2. Sample

As mentioned above, a kitchenware manufacturer and seller in Taiwan was selected for the survey setting. Founded in 1960s, the case company had stainless steel cookers as its major products and sold them in Taiwan, Japan, Northern America, Hong Kong, Australia and Malaysia. Highly emphasizing the importance of quality, the case company had been certified Japan's SG, U.S.A.'s UL and ISO 9001 and it had had the most advanced facilities for manufacturing stainless steel cookers in Asia. It had also devoted itself to continuous research and development to assure its customers of original taste, health and products' firmness. In the future, it had the vision of being the leading brand in the Chinese society. Despite its achievement, the case company had some serious problems such as how to differentiate itself from its competitors, increase market share and boost profits when the authors were invited for consultancy. Kitchenware market had been faced with severe competition worldwide. Building customer knowledge base through knowledge management provides for businesses an avenue for differentiating themselves from their competitors, increase market share and boost profits. A better understanding of customers made possible through knowledge management will enable customized products and services and sense of closeness and, subsequently, better customer relationships. Through the analysis of its mission and vision, the management of the case company considered the improvement of their customer knowledge being crucial for enhancing their core competences and long term competitiveness.

In terms of customer knowledge, the case company had invited its customers to a membership of its customer club. It provided for its members product warranty, services and direct mails. However, due to the lack of customer knowledge, the products' direct mails were delivered to all members without any segmentation. In the meantime, it also had little ideas about who its most profitable customers were. To know and serve its customer better and to enhance its customer knowledge through finding out for the case company in our study what resource provision and what step of knowledge management process it should improve were quite important under the circumstance. In our study, the unit of analysis was an employee in the case company. Questionnaires were sent to the employees in the various departments of the case company in its branches in Taiwan region. Respondents were asked to react using a five-point scale ranging from "Strongly disagree" to "Strongly agree". We got 54 responses from 54 questionnaires. The response rate was 100%.

3.3. Analysis

SPSS software package was adopted for data analysis in the paper. The data analysis methods were as follows.

3.3.1 Descriptive statistics

For individual variable or factor, descriptive statistics was adopted to describe the mean and standard deviation of data.

3.3.2 Reliability analysis

The value of Cronbach's alpha was adopted to examine the reliability of all constructs. For high reliability, the value of Cronbach's alpha should be greater than 0.7; reliability is low if its value is less than 0.3.

3.3.3 Analysis of regression

Analysis of regression was adopted by this paper to explore the relationship between the dimensions of resource provision and know management process and the relationship between those of knowledge management process and customer knowledge performance.

3.3.4 Analysis of variance

ANOVA was adopted by the study to examine the differences between respondents who surely understood their corporate mission and vision and respondents who did not regarding their success of knowledge management process and of customer knowledge performance.

4. RESULTS

4.1 Sample characteristics

Table 1 below summarizes the demographic characteristics of the respondents. Our sample was in the Taiwan region of the case company.

4.2 Instrument reliability

As mentioned above, the analysis of scale reliability was performed by computing and examining Cronbach's alpha coefficient. As shown below in Table 2, the values of Cronbach's alpha for most constructs were higher than 0.7 and were considered as reliable. Four components' reliabilities were between 0.5 and 0.6. They, however, still exceeded Nunally's (1967) suggested minimum reliability of 0.5 - 0.6 for instruments used in early stages of exploratory research. Due to the exploratory nature of the study, they were included in the subsequent data analysis activities.

4.3 Descriptive statistics of the three dimensions

4.3.1 The resource provision dimension

The authors had done interviews with some managers and employees in the case company after the questionnaire survey to verify the findings of the study. They agreed upon the findings presented to them. The mean scores and standard deviations of the constructs are shown below in Table 3. In the dimension of "Resource provision", the mean scores of the constructs were more than 3 and between 3.75 and 3.80. The respondents

reported moderate positive attitude towards the resource provision for knowledge management process in the case company.

4.3.2 The knowledge management process dimension

In the dimension of “Knowledge management process”, the mean scores of the constructs were more than 3 and between 3.36 and 3.67. The respondents reported moderate positive attitude towards the success of knowledge management process in the case company. Among the four steps of knowledge management process, the respondents demonstrated the greatest reported success in the step of “Knowledge define” and the least reported success in the step of “Knowledge apply, create and sell” in the case company.

4.3.3 The customer knowledge performance dimension

In the dimension of “Customer knowledge performance”, the mean scores of the constructs were more than 3 and between 3.29 and 3.86. The respondents reported moderate positive attitude towards the success of customer knowledge performance in the case company. Among the constructs of customer knowledge performance, the respondents demonstrated the greatest reported success in “Achieving corporate mission and vision” and the least reported success in “Managing networking” in the case company.

4.4 Analysis of regression

4.4.1 The association of the dimension of “Resource provision” with that of “Knowledge management process”

As shown below in Table 4, all the estimated regression coefficients were greater than zero and the component of “Organization and technology” was positively and statistically significantly associated with the success of four steps of knowledge management process. In the case company, however, our study did not provide empirical support for the association of “Incentives” with any of knowledge management process, which was quite contradictory against the claims on the importance of incentives for knowledge management in the literature. Nonetheless, in this particular setting, the case company had just decided to manage its customer knowledge systematically. All the steps of knowledge management process in the case company were voluntarily adopted by people rather done for incentives provided by the case company. Under this circumstance, the provision of delegated organization and information technology seemed more helpful for the success of knowledge management process. In the long run after knowledge management process is carried out systematically at corporate level in the case company, the component of “Incentives” might show stronger association with the success of knowledge management process as suggested by the literature. Interviews with managers and employees of the case company after the questionnaire survey confirmed this argument.

As also shown below in Table 4, “Resource provision” explained 40.7% of the variance of the step of “Knowledge define”; 59.9% of the variance of the step of “Knowledge capture, select and store”; 36.4% of the variance of the step of “Knowledge share”; and 36.5 % of the variance of the step of “Knowledge apply, create and sell”. Overall, the amount of variance explained by the proposed framework appeared reasonable.

4.4.2 The association of the dimension of knowledge management process with that of customer knowledge performance

As shown below in Table 5, most of the estimated regression coefficients were greater than zero and the step of “Knowledge apply, create and sell” was positively and statistically significantly associated with the success of five customer knowledge performance components. That is, in the case company, “Knowledge apply, create and sell” made great contribution on the success of achieving corporate mission and vision and managing artifacts, practice, regulation and system and networking. On the other hand, however, the step of “Knowledge define” was only helpful for achieving the corporate mission and vision and the step of “Knowledge share” made considerable contribution only on managing artifacts. For the step of “Knowledge acquire, select and store”, three of the five estimated regression coefficients were negative with two of the three at 5% significance level indicating that the step was even harmful for customer knowledge performance in the case company. The strong negative association implies that people who reported to use less knowledge acquired, selected and stored by the case company, achieved more success on managing artifacts and networking. This might be because the acquired, selected and stored knowledge regarding artifacts and networking was outdated, mistaken, incomplete or inappropriately documented. Interviews with managers and employees of the case company after the questionnaire survey confirmed this argument.

The step of “Knowledge define” was helpful for achieving the corporate mission and vision. The strong positive association implies that people who reported to accepted more knowledge defined by the case company, did better on achieving corporate mission and vision. This might be because the case company depicted a clear picture of its mission and vision and core competences and defined what sort of knowledge might help the enhancement of core competences and achievement of mission and vision. However, our study did not provide empirical support for the association of “Knowledge define” with the managing of artifacts, practices, regulation and system and networking. As mentioned above, in this particular setting, the case company had just decided to manage its customer knowledge systematically. The systematic definition for specific knowledge sources had not been implemented at the corporate level. Thus, at this stage, “Knowledge define” did not associate with the success of managing of

knowledge sources in the case company. The step of "Knowledge share" made considerable contribution on managing artifacts. The strong positive association implies that people who reported to use more knowledge shared within the case company, managed artifacts better. This might be because artifacts could be attained more easily through the step of "Knowledge share" within the case company compared with practices, regulation and system and networking due to their tacit nature. Our study did not provide empirical support for the association of "Knowledge share" with achieving corporate mission and vision despite that people who reported to accepted more knowledge defined by the case company, did better on achieving corporate mission and vision as mentioned above. This has an interesting implication that convincing people to accept the mission, vision and core competences defined by the case company, rather than circulating unconvincing mission, vision and core competences through the step of "Knowledge share" could be more helpful for achieving corporate mission and vision. Interviews with managers and employees of the case company after the questionnaire survey confirmed the arguments mentioned above.

As also shown below in Table 5, "Knowledge management process" explained 56.2% of the variance of the success of "Achieving corporate mission and vision"; 54.5% of the variance of the success of "Managing artifacts"; 61.5% of the variance of the success of "Managing practices"; 64.1% of the variance of the success of "Managing regulation and system" and 56.8% of the variance of the success of "Managing networking". Overall, the amount of variance explained by the proposed framework appeared high.

4.5 Analysis of variance

4.5.1 *The difference in the dimension of "Knowledge management process"*

As shown below in Table 6, for four of the four knowledge management process, respondents who surely understood their corporate mission and vision reported statistically significant higher scores than respondents who did not. Therefore, in the case company, respondents who surely understood their corporate mission and vision achieved greater success of "Knowledge define", "Knowledge capture, select and store", "Knowledge share" and "Knowledge apply, create and sell" compared with respondents who did not.

4.5.2 *The difference in the dimension of "Customer knowledge performance"*

As shown below in Table 7, for four of the five knowledge management performance measures, respondents who surely understood their corporate mission and vision reported statistically significant higher scores than respondents who did not. Therefore, in the case company, respondents who surely understood

their corporate mission and vision did better for "Achieving corporate mission and vision", "Managing artifacts", "Managing practice" and "Managing regulation and system" compared with respondents who did not.

5. CONCLUDING REMARKS

Under severe global competition, building customer knowledge base through knowledge management provides firms with strategic weapon to differentiate themselves from their competitors and to retain and strengthen competitiveness in the era of knowledge economics. Thus, this paper proposes a conceptual framework for exploring the relatedness of the three dimensions of resource provision, knowledge management process and customer knowledge performance and exploring how customer knowledge can be enhanced through resource provision and knowledge management. A case study has been provided for demonstrating and explaining how it operates. The proposed framework emphasizes the link of knowledge management to corporate mission and vision and that they set out the direction of corporate knowledge management. This study has taken a kitchenware manufacturer and seller in Taiwan as an example to perform a field study to collect the concerned data for exploring the expressed relatedness among the three dimensions of the proposed framework as reported by the respondents in the case company. As hypothesized, we found in the case company that resource provision was positively associated with greater success of knowledge management process and that knowledge management process was positively associated with greater customer knowledge performance. Also as hypothesized, we found in the case company that people who surely understood their corporate mission and vision achieved greater success of knowledge management process and of customer knowledge performance than people who did not. This study has taken as well the case company as an example to show how to enhance its customer knowledge through finding out what resource provision and what step of knowledge management process it should improve. This study has also demonstrated the link between corporate mission and vision and knowledge management as people who surely understand their corporate mission and vision can outperform in knowledge management process and in customer knowledge performance compared with people who do not.

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Due to the space limitation, the full paper including tables, the discussion of implications and references is available upon request from Hwan-Yann Su.