

# **STUDY OF KNOWLEDAGE HOUSE ON CONCEPTION DEVELOPMENT --- A VIEWPOINT BY CUSTOMER KNOWLEDAGE**

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## **ABSTRACT**

Under the background of internationalization of corporations and globalization of economy, understanding of customer's pluralized demands has become one source of corporate competitive advantages. And customer's participation has been proved to be one of the factors which are crucial to the success of developing new products. This research adopts the idea of quality feature spreading and attempts to take focus group interviews (FGI) among qualitative research methods, aiming at setting up propositions about relationships between corporation knowledge and customer knowledge. This research will make a study on and try to explain the importance of customer knowledge on corporate competitive strength through the use of the notion of knowledge house.

**KEYWORDS:** competitive advantage, key factors to success, quality feature spreading, knowledge house, focus group interviews, virtual community

## **INTRODUCTION**

In the viewpoint of neo-classic economic school, the most important productive resources are labor, land, and capital. But in modern times, information and knowledge have become chief productive resources (Bell, 1973), and the neo-classic economic theory has been replaced by organizational resources basic theory (Barney 1991, Conner 1991; Day 1994; Hunt and Morgan 1995). Resources basic theory extends the sorts of resources originally from labor, land, and capital to intangible assets such as corporate knowledge strength, organizational culture, and customer relations, which are also regarded as the sources of competitive advantages. Therefore, on many aspects, customers request that corporations should have implementation force and creativity, so corporations should have a deeper understanding of customers (Davenport and Klahr, 1998). While in the 21<sup>st</sup> century, the marketing focus will also shift from the past Volume Marketing and Section Marketing into Customer-Centric Marketing. So, a corporation must acquaint itself with customers and satisfy customer's needs and desire. Therefore, knowledge about customers can be called 'knowledge with highest rewarding rate' (Sheth, Sisodia and Sharma, 2000; Sarvary and Miklos, 1999).

But, customer knowledge cannot develop by itself. Knowledge itself cannot produce direct organizational achievements (Demarest, 1997), it depends on management ability of customer knowledge of the organization. When the organization and customers interact with each other, this ability helps all the members in the organization combine and classify customer knowledge, transfer knowledge and share knowledge, and finally create new products and services so as to meet demands of customers. Customer's participation has been proved to be one of the key factors for the successful development of new products (Gupta and Sounder, 1998). These findings obtained from real demonstrations

suggest that corporations should cooperate with customers to improve the success rate of their new products or services. Therefore, academic and actual practice circles have become interested in developing new products and ways of interaction between corporations and customers, and invested a lot in these aspects, among which Customer Relations Management (CRM) has become one typical example. This research adopts the idea of quality feature spreading to analyze the relationships between corporation knowledge and customer knowledge. This research will make a study on and try to explain the importance of customer knowledge on corporate competitive strength through the use of focus group interviews and the notion of knowledge house. The purpose of the discussion is how to overcome the Gap between domestic industrial strategic plan and customer needs through the use of customer knowledge and to get a deep understanding of the influence of customer knowledge management and corporate decision making pattern.

## **LITERATURE REVIEW**

### Customer Knowledge

With the Killer Application of Internet, corporations can no longer wait for customers to come to them; customers have changed from passive onlookers to key participators in corporate activities. Prahalad and Ramaswamy (2000) hold that the single contacts channel between corporations and customers has been multiplied. After customers' taking roles of creating value and confronting value, the market has turned into an open-shelf forum.

Today, many theories and demonstration researches show that cooperation with customers is quite valuable for innovation and economic benefits (Biemans, 1992; Gemunden,; Hakansson and Snehota, 1994; Gales and Mansour-Cole, 1995). Wayland and Cole (2000) believe that executors in a corporation should not only collect and analyze quantized information in order to understand customers. Accumulation of data and collection of information is only the first step for getting customer knowledge. Like crude material, customer knowledge can turn into useful knowledge only after sorting, analyzing, and perceptive understanding. Customer knowledge has become the best reference for investment decision and resources allocation in a corporation.

Wayland and Cole (2000) define customer knowledge management as 'effectively organize and make use of knowledge and experience about obtaining, developing, and maintaining a favorable customer group. The central topic for discussion of customer knowledge management are composed of three elements, 'customer', 'knowledge' and 'management', which are interdependent on each other. In contrast, Pepper, Rogers and Dorf (1999) defined customer relations management from the point of value as: 'lend an attentive ear to customers to further understand customers' mind and try its best to satisfy their demand'. Therefore, the corporation should learn from customers from points which are most valuable to customers.

While Gordon (1999) has an innovative idea including the use of new technology, which defined customer relations management as: 'with a general application of several information technologies to keep customers who have a contribution to the corporation; on the other side, customer relations management is a repetitious course, which needs continuous improvement in order to satisfy customers' dynamic demands'.

## Support and Application of Information Technology

With the rapid development of information technology, remarkable changes have taken place in commercial patterns and corporate process. As a result, new challenges and opportunities have also emerged. Drucker (1985) holds an opinion that the capability of an organization to develop a new product or service comes from a dynamic knowledge about customers and competitors, and knowledge about integration of information technology. Greengard (1998) further points out that utilizing information technology has become a simple and rapid way to the success of knowledge management. It can help members of an organization communicate in a point-to-point way, and gain relevant latest knowledge as soon as possible. The so-called application of information technology contains computer devices, information networks inside the corporation, the establishment of knowledge database and place of knowledge exchange. It enables the corporation to cross the boundaries with customers and external departments and accelerates the creation and share of both internal and external information (DiMattia and Oder, 1997 ; Blake, 1998 ; Hibbard, 1997; Mayo, 1998).

On the basis of knowledge management environments mentioned above, Hansen, Norhria and Tierney (1999) put forward a framework of a combined knowledge management strategy, in which some organizations adopt a knowledge management strategy with computer devices at its core, knowledge must be clearly sorted and coded, and stored in the whole knowledge database, to which any one in the organization can have a very easy access. This is called codification. Some organizations store knowledge on the creator of knowledge. The share of information is completed through personal contacts and communication. Computer is only an assistant tool for the communication of knowledge between employees, not for the storage of knowledge. This is called personalization. For the handling of customer knowledge, Shaw and Stone (1990) hold the opinion that the content of customer database should contain the following data:

- (1) Material about customers and potential buyers: information about contact means with customers, such as telephone, address, and descriptions about their characteristics and general behaviors, e.g. psychological and behavioral data.
- (2) Trading data: chiefly record about commercial trading data about customers and corporations, such as ordering record and returned goods record. Collection of trading data is used to do FRAC analysis, i.e. the difference analysis of customers' purchasing.
- (3) Sales promotion material: it records contents of each promotion activity, such as market testing: who reacts on these activities? Which media are used and what is the communication strategy? How about the final result of trading and finance? This kind of data helps in analyzing and integrating past promotions.
- (4) Products data: including data about products in each promotion, who bought these products? When and where?
- (5) Population and geography data: It records residence of customers, their social status, and commercial data.

Jackson and Wang (1994) divided internal database contents as customers for

consumables and customers for industrial goods. It contains: (1) Customers for consumables: name, vocation, company address, home address, sex, age, income, length of inhabitation, number of family members, single or multi-habitations, source of data collection, time record of data collection, telephone number, ordering pattern, reaction to promotions, purchasing history, living styles, customer value, trading volume, type of payment, product lines, demand mode, and so on. (2) Customers for industrial goods: name of company, name of buyer, title and position of the buyer, decision influencer's name and his title, company address, telephone number, SIC, scale (earnings and numbers of employees), anticipated product demand, reaction to promotion, purchasing history, estimated score, and so on.

### Information Shift and Control

In the process of customer knowledge management, corporations extract and transform corporate knowledge about running and management decision support according to existing and potential customer data. Therefore, there is no difference between the creation of customer knowledge and the creation of corporate knowledge. They are all transformed from data into information, and then to valuable knowledge. Many scholars probably give emphasis on the absorption, creation, and share of information in discussing knowledge management, but knowledge house established in this research stresses on customer knowledge on the basis of customer and market information. So, after collecting basic data of customers, trading records, service character data, special favorite record, and sales data, corporations will systemize and structuralize it into customer knowledge easy to transfer. And still after transferring of communicated and absorbed knowledge, it can become corporate knowledge which can create new value in the organization.

Scholars have different opinions on the transformation pattern of customer knowledge and corporate knowledge. Nonaka (2001) believes that knowledge inspired by customers or providers and produced by the interaction between the productions of the corporation, market, and thinker patterns is a necessary procedure of internal and external interactions of the organization. It sparks new knowledge and thus forms a dynamic exchange pattern, illustrated in Figure One.

Prahalad and Ramaswamy (2000) hold that the following step after establishing customer data is to create correct customer knowledge and make use of it. But, to guide customer's interaction and utilizing customer capital is not an easy task. This research points out that managing agents should learn at least how to encourage active dialogues, promote customer community, administer customers' pluralized behaviors, and create personalized experience under common efforts. Personalized experience means that managing agents have understood that customers no longer purchase just for interest, but for the participation experience with experts and other customers.

### Design of Focus Group Interviews (FGI)

After a precise collection and review of literature, we can get a preliminary understanding of the relations among sources of customer knowledge, support and application of information technology, and corporate knowledge, and their influence on sales competitive strength. In order to get different opinions from academic scholars and actual practice manager to establish a complete proposition framework, this research makes focus group interviews on scholars and managers in the field in our country.

There are altogether 13 interviewees (5 from academic circle and 8 from actual practice circle). Scholars from academic circles are chiefly professors on customer relations management and marketing strategy, while interviewees from actual practice are mainly high-ranking director of sales department in the circulation circle. All the interviewees have worked in this field more than ten years, and their rankings are professors, assistant professors, manager, section chief, and deputy general manager. Two interviews were held in Taipei and Kaohsiung, each of which lasted within two hours according to beforehand plans.

Procedures of FGI in this research are designed according to circulation theory. Questions and data in interviews are prepared according to FGI interviewee list, appointed time and place of interview. Questions are mailed to interviewees in advance for their preparation. Before the interview, Check again through telephone and remind interviewees of attending on time.

As to interview agenda, the average interview time is two hours and a half including agenda description and self introduction, and the expected time for discussion is two hours. According to the plan of interview, a host will direct managing agents from actual practice circle to deliver their opinions and control the time of speech. A sound engineer will record the whole course with digital devices and make a record with projections on key words convenient for reference in discussion. And a written record will also be kept. After interview, all the scripts will be put in order for analysis and used to list out unsettled focus questions for discussion in latter interviews.

During the course of FGI, Critical Incident Technique is adopted to encourage members of focus group to discuss with actual examples in order to make clear the characteristics of customer knowledge and relationships among strategies which have an influence on corporate knowledge decision making.

## **RESEARCH LIMITATION**

Taking qualitative research method of FGI, this research is original in this field in our country because this method is seldom adopted in research on customer knowledge management and corporate knowledge management. But, it also bears some limitations.

The chief limitation comes from interviewees. Since interviewees of FGI are either high-ranking directors in corporations or expert scholars with rankings above assistant professor, it is actually very difficult to gather them together for such FGIs. Whether they are willing or have free time to accept FGIs must be taken into consideration

## **RESEARCH PROPOSITION**

On the basis of above literature and research findings of FGI, this research lists out five important propositions for reference in later researches.

Proposition One: The higher the customer's position is in a corporation, the more effective advice he can give for products or services.

Explanation: From the interviews, the higher the title of the customer or his position in the corporation is, the nearer he can approach the top-level officials, the more influential he is in making decisions and arbitrations. As a result, he is rather confident in communicating

and giving valuable suggestion on products or services.

Proposition Two: The higher the customer's educational level is, the more effective advice he can give for products or services.

Explanation: All the interviewees unanimously hold that the higher the customer's educational level is, the more capable he is in giving to-the-point feedbacks in service questionnaires or other forms of feedbacks.

Proposition Three: The more complete the information support system in a corporation is, the more effectively it can meet customers' demands.

Explanation: During the interviews, all the interviewees agree that the more complete the information support system (e.g. store system of buying and selling record, electronic answering letters) in a corporation is, the more quickly the corporation is in leaning customer's needs and market changes.

Proposition Four: Through dialogues between corporations in virtual community, the two trading sides can have an effective interaction on each other and accelerate the combination and absorption of customer knowledge.

Explanation: Because of the real time character of virtual community, the interactions the two trading sides can feel become more intense. Staff in retail sectors can obtain updated information and convey suggestion to the high-level decision making units at any moment.

Proposition Five: The more complete the information support system is, the more effectively the corporation can collect customer knowledge and strength corporate decision knowledge.

Explanation: From the interviews, the more complete the information system (e.g. store system of buying and selling record, electronic answering letters) is, the more quickly the corporation can accumulate large quantities of customer knowledge and thus build up an enormous knowledge management database about corporate marketing and strategy planning. It can bring valuable intelligence for the corporate running strategy.

## **COLLECTION OF SUGGESTIONS AND KNOWLEDGE HOUSE PATTERNS**

According to the establishment of the above five propositions in the research, customer knowledge and information support system constitute the two pillars for corporate knowledge house under the notion of corporate feature spreading.

However, under the possible influence of technological factors from the selling sides such as professional skills on processing information of sales personnel and friendliness of information support system operation, even if high cost of corporate scale, a complete basic information network, customer's educational level, and professional rankings can provide a favorable customer knowledge, it cannot necessarily transform into corporate core knowledge. Therefore, relevant coordination such as dialogue in virtual community is indispensable in fostering close relations between the two trading sides.

As illustrated in Figure Two, customer knowledge leads to the circulation of concealed inside knowledge and apparent knowledge from both sides through information support system. And then, coordination like interactions in virtual community accelerates the transformation of customer knowledge into corporate knowledge. The whole series of

knowledge transformations are generalize as knowledge house operation in this research.

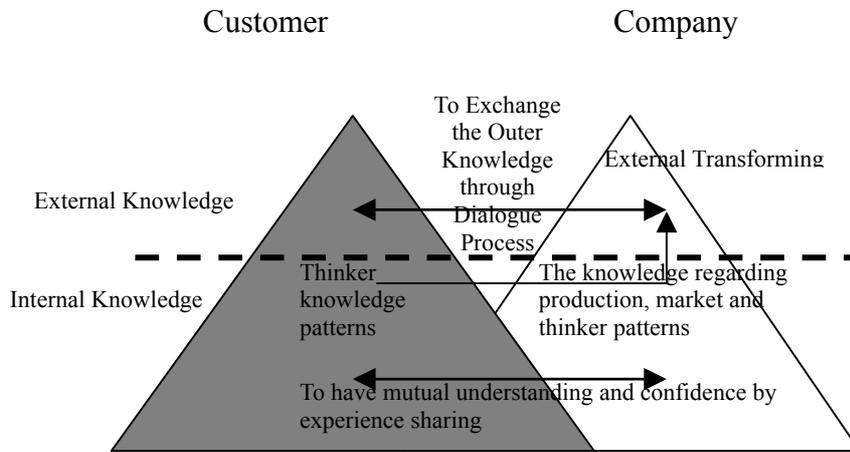


Figure one: The Model of Knowledge Interaction  
Sources : Nonaka,I.,Toyama,R. and Konno ,N.(2001)

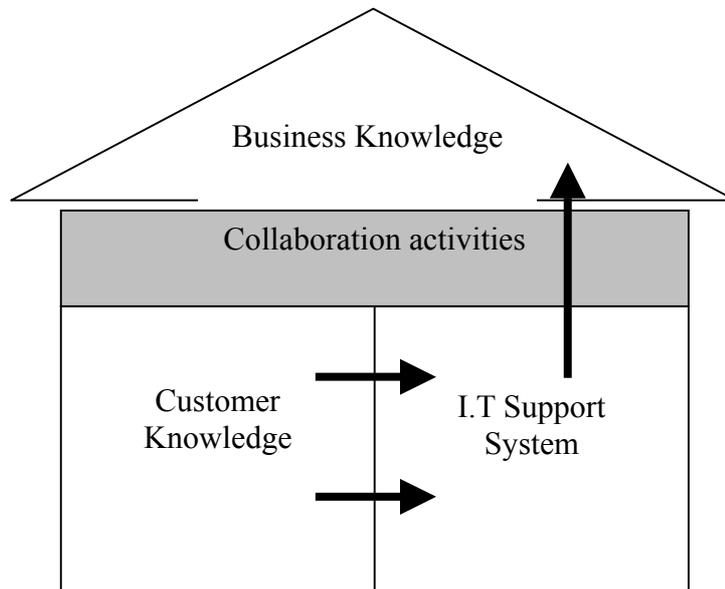


Figure two: The Frame of Knowledge House  
Sources : Sorting by This Study

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