

National Context as an Important Variable for the Development of IT-based Strategic Capability

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Abstract

This study was initiated to inquire as to why Wal-Mart failed in the Korean market. For multi-national corporations, environmental differences such as cultural and social differences among countries require business strategies to vary country by country. In Korea, Confucian Ethics are penetrated in every aspect of people's lives. An important aspect of Confucian Ethics is the role and responsibility of women in society. Considering this, businesses need to understand Korean women's preferences as consumers and develop business strategies accordingly. This study emphasizes that IS strategy is one component of the business strategy and, as such, must be rooted in business issues. Understanding that IS strategy should fit to national contexts, this study investigates the underlying process in which IT-based strategic capability is developed according to national context to gain competitive advantages.

Keywords : IS Strategy, Business Strategy, Strategic Alignment, Multi-National Business, Strategic Capability

1. Introduction

Chandler's seminal work on strategy [Chandler, 1962] explains the relationships between environments, strategy, structure and business performance. He asserts that the organization's environment shapes strategy, and the firms whose structure matches their strategy become more effective than mismatched firms. Chandler emphasizes the importance of designing and implementing strategies according to distinct contexts to gain competitive advantages. For multinational businesses, the environmental differences come from disparities in cultures, political systems, economical systems, legal systems and the level of economic development [Hills, 2009]. Such differences among countries require that businesses vary their strategy country by country.

While Chandler [1962] focused on the fit between a firm's environments and strategy, resource-based view (RBV) focused on a firm's strategic resource and capability as the source of competitive advantages. Among a firm's capabilities, the capability that distinguishes a company from its competitors in the eyes of customers is defined as strategic capability [Stalk et al., 1992]. An example could be Wal-Mart's Inventory Replenishment Capability. RBV considers that capabilities are grounded in organizational practices, business processes and information systems; therefore, the focus is on the infrastructure that supports the capabilities [Stalk et al., 1992].

Considering that strategy should fit to national contexts, this study investigates the underlying process in which IT-based strategic

capability is developed according to national context to gain competitive advantages. According to Konsynski and Karimi [1991], a firm's global IS strategy needs not only to address coordination needs of global enterprise but also to address country issues. However, many CIOs find it difficult to fully understand their international operations, and they fail to develop appropriate IS strategy. This justifies the need for this study. This study in particular addresses the following questions :

- what national conditions become important to look into to develop strategic capability?
- what has been performed in relation to (1) aligning business and IS strategies; and (2) configuring IT, business processes and other organizational resources to develop strategic capability?

This is a revelatory, single case with a historical perspective. A revelatory case in a single-case format is appropriate for researching the complexity of the phenomena, where little or no previous research exists [Yin, 1994]. Since IT-based strategic capability is a product of the environment and the agent's (e.g. CEO/CIO) decisions and technological choices made in the past [Fredrickson, 1986; Kieser, 1994], the process of developing such a capability can best be understood by taking the historical approach. Further, the effects of strategic capability on value-creation can best be understood from the historical and interpretive analyses of events and actions taken by one or more agents operating within socio-economic environments [Mason

et al., 1997; Zahra and George, 2002]. History in general provides high-valued knowledge to decision makers, which can be used effectively by decision makers in different times [Neustadt and May, 1986]. Results of this study provide senior management with guidelines and a framework for designing an IT-based strategic capability according to given country conditions.

According to Eisenhardt [1989], a priori specification of constructs based on extant literature assists in designing case research and to link the collected data to the questions of a study [Eisenhardt, 1989]. Based on previous research on strategic alignment, international business, and organizational theory, the organizational and environmental elements that must be considered and aligned with the corporate strategy in a global environment were identified. Using the identified elements, a case study on COMPANY C was performed.

The case is chosen based on theoretical sampling [Glaser and Strauss, 1967; Eisenhardt, 1991;

Lipset et al., 1956]. The case involved major development of the firm's capability using technological implementation, which matches with the objective of this study. The case data were collected from various sources including interviews, corporation publications, project documents and various trade publications. For the future study, general propositions will be generated inductively. The following table demonstrates the design for this study, comparing it to the recommendations by Eisenhardt [1989].

Although case research has a disadvantage of bringing systematic rigor, this research used several tactics to improve methodological rigor. To improve construct validity, potentially important constructs were identified from organizational theory and strategic alignment, and multiple sources of evidence were used to build construct measures [Yin, 1994; Eisenhardt, 1989]. To improve reliability, efforts were made to elicit detailed research steps and to document the research process [Yin, 1994].

<Table 1> Research Design

Eisenhardt's step [1989]	Study design of this research
1. Definition of research question	Two research questions were defined
2. A priori specification of constructs	Potentially important constructs were identified from organizational theory, strategic alignment and international business. These constructs were explicitly measured during interviews and review of documents.
3. Selection of cases	Selected a case from an initial pool of multiple cases.
4. Multiple data collection methods	Interviews, corporation publications, project documents and various trade publications are used to provide richness of the data and different perspectives.
5. Analyses of data	Similar to approach taken by Quinn [1980], a teaching case for COMPANY C was developed as a prelude to this theoretical study. This gives researchers a familiarity to the case being analyzed.
6. Generating propositions or hypotheses	General propositions are generated from the case.
7. Enfolding literature	Compared our theory with other management and IS literature.

2. Strategic Capability : Resource-Based View

Resource-Based View (RBV) argues that longer-term success would result from a realignment of the organization's resources and capabilities to match the demands of the environment. In RBV, inimitable and non-substitutable resources and capabilities are believed to drive value creation and sustainability. The skills and knowledge of the human resources along with other resources like IT and organizational processes are linked together to form an organizational capability such as Information Services and Research and Development (RandD) [Byrd and Turner, 2000; Broadbent and Weill, 1997]. Firms then can possibly be viewed as a collection of such capabilities [Byrd and Turner, 2000; Broadbent and Weill, 1997].

Strategic management literature labels the process of forming capabilities through arranging existing skill sets as 'bundling' [Sirmon et al., 2007]. Capabilities can also be formed through reconfiguring a current resource bundle such as acquiring (recruiting) and developing (training) new resources and divesting less valued resources [Uhlenbruck et al., 2003; Sanchez, 1995]. New capabilities are also formed through coordinating existing capabilities or acquiring new capabilities [Hitt et al., 1998]. Thus, skills and capabilities can be viewed as organizational elements linked to form a large-scale organizational structure such as functional groups (e.g. marketing) and technical areas (e.g. printed circuit board assemble) [Galunic and Rodan, 1998].

Among a firm's capabilities, the capability

that distinguishes a company from its competitors in the eyes of customers is defined as strategic capability [Stalk et al., 1992]. This capability-based competition emphasizes the organizational practices and business processes in which capabilities are rooted. The business processes are considered as the building blocks of corporate strategy, and a capability is viewed as a set of business processes that are strategically understood. In this study, strategic capability is defined as a set of business processes and supporting resources such as information systems and human resources that deliver value to the customer.

3. IS/IT Alignment in Global Environment

The use of IS (Information Systems) is considered to directly influence on a firm's competitive position. The most effective way to achieve strategic benefits from IS is to focus on businesses by analyzing current business problems and environmental changes, considering IS as one aspect of the solution [Earl, 1992]. Consequently, IS strategies must be developed within the context of the business strategy formulation and implementation processes [Ward and Peppard, 2002].

With the lack of alignment between IS and business strategies, business opportunities can be missed and thus business performance is not improved. Problems with the IS strategy process include [Teo and Ang, 2001] : (1) ignoring business objectives, (2) failing to translate business objectives and strategies into action plans, and

(3) relying exclusively on the user' wish list for application ideas. A major factor for misalignments between business and IS is the mind gap between strategists and technologists [Pepper and Ward, 1999]. In the Spring 2002 issue of Sloan Management Review, Sauer and Willcocks [2002] argued that "many companies wrongly assumed that strategists and technologists would talk to one another or that one side, typically IT, would address the alignment of business needs and technology support (p. 42)." Shared domain knowledge between IT and business executives improves the communication between IT and business executives and the connections between business and IT planning [Reich and Benbasat, 2000]. This in turn influences strategic alignment. Still, how well IT is aligned with business goals remains one of the top issues in IT management [Luftman et al., 2007; Huang and Hu, 2007].

Ward and Peppard [2002] pointed out the difference between IS and IT strategies : "IS strategy deals with what to do with information,

systems and technology, and how to manage the applications from a business point of view. It focuses on the close alignment of information and systems in support of business needs and on identifying and exploiting competitive opportunities for IS/IT. IT strategy designates how technology is to be applied in delivering information and how the technology resources are managed to meet the range of business needs [p. 144]."

For multi-national businesses, business strategy could vary country by country according to cultures, political systems, economic systems, legal systems and the level of economic development [Hills, 2009]. Such differences require that IS/IT strategy vary country by country. The differences between countries raise many problems and challenges that businesses in a domestic environment never confront. Some of the challenges that must be considered in developing global IS/IT strategy are listed in <Table 2> below.

<Table 2> Challenges of Global IS/IT Management (Adapted from [O'Brien, 2011])

Type	Challenges
Cultural challenges	<ul style="list-style-type: none"> • Cultural interests • Religions • Customs • Political philosophies
Political challenges	<ul style="list-style-type: none"> • Many countries regulate or prohibit the transfer of data across their national boundaries • Others severely restrict, tax, or prohibit imports of hardware and software • Some have local content laws that specify the portion of the value of a product that must be added in that country if it is to be sold there • Others require a business to spend part of the revenue they earn in a country in that nation's economy
Geo-economic challenges	<ul style="list-style-type: none"> • Physical distances are still a major problem • It may take too long to fly in specialists • It is difficult to communicate in real time across 24 time zones • Many countries do not have good telephone and telecommunications services • It may be hard to find skilled local workers • There can be great differences in the cost of living and labor costs between countries

4. Case of COMPANY C

4.1 Background of the Mother Company

The S Department Store, the mother company of COMPANY C was established in Seoul in 1930 as a store of the Mitsukoshi Department Store in Japan. Since then, S Department Store has accumulated expertise and know-how in running luxurious department stores. On the first of May, 1984, the Yeoungdeungpo branch of S Department Store was scheduled to open. The management of S Department Store decided that the very first POS (Point of the Sales) System should be installed in the Yeoungdeungpo branch. In S Department Store, there was no IT expert who could lead the implementation of the POS system. In November, 1983, the CIO of COMPANY C was scouted as the IS Director of S Department Store.

4.2 Supplier-Side Experience of the CIO

For the successful implementation of the very first POS system in S Department Store, the CIO diligently studied both success and failure cases of the POS system. When it came to the selection of the POS system, S Department Store chose a Japanese POS brand, TEC over American brands such as IBM and NCR. To be close to the CIOs of the top five Japanese department store brands (Mitsukoshi, Takashimaya, Isetan, Hankyu and Tokyu) that had successfully installed the POS system, the CIO went to Japan twice a month on average. He maintained a close relationship with them and learned a lot about their POS systems. With the help from

the store development team of Mitsukoshi Department Store in Japan, the POS system in the Yeoungdeungpo branch was successfully installed and the opening of the branch store went smoothly.

The CIO learned that the POS system would fail if the employees did not utilize the system. Once the POS system was installed in S Department Store, he tried hard to let the employees in the business side utilize the system. However, when the POS system was first introduced, the accounting department was reluctant to give the data to the business team due to the tax evasion problem. The business team needed the data to perform the sales contribution analyses of each product for merchandising. The supplier was also reluctant for knowing what products were supplied for what amount. The CIO tried to resolve the problems by institutionalizing the use of the POS system by the retail stores through the provision of tax benefits.

Initially, in-store bar codes were implemented, and the suppliers were asked to attach in-store bar codes. In 1987, before the 1988 Olympics, EAN 880 code (European code) consisting of the supplier code and the product code was adopted as a national standard after going through several meetings with an official in the Ministry of Commerce. S Department Store implemented POS systems in other branches such as Main Store, Dongbang Plaza and Miari.

4.3 Opening of COMPANY C

In 1993, the first store of COMPANY C was

opened with one store in Changdong, Seoul. With the help of consultants from TEC and the benchmarking outcome of the Japanese discount stores, the POS system for COMPANY C was developed on top of S Department Store's POS system. To develop the POS system, EAN based KAM bar codes were developed. In the beginning, 50~60% of the products had bar codes attached. COMPANY C had a policy that suppliers with bar codes attached were preferred. Suppliers without bar codes were assigned with in-store markings. On the opening day of COMPANY C, even the IS employees in S Department Store helped COMPANY C scan the products and resolve the problems with the POS system. COMPANY C did not have clear ideas about how to run their first discount store and had to struggle in the early days of their operation.

4.4 Demand-Side Experiences of the CIO

In 1995, the CIO became the Director of the Strategic Planning Team in S Corporation after S Department Store and COMPANY C became a member of the conglomerate, S Corporation. He was pressured to be better than KClub, another discount store in Korea. In order to learn the discount store's operation in advanced countries, COMPANY C wished to have a strategic alliance with a company that had no plan to open a store in Korea. Since Wal-Mart had a plan to expand to the Korean market, S Corporation started a strategic alliance with Price Club in the USA to learn management know-how. S Corporation agreed to return 3% of the

revenue to Price Club and opened the first store in Yangpyung on the 15th of September, 1995.

The CIO went to San Diego several times, where the headquarter of Price Club is located, to learn IS of the company. He became very close to the CIO of Price Club and learned quite a bit of the firm's IS. The Price Club in Yangpyung ranked number one in sales among 6000 US stores. The headquarter's of Price Club pressured S Corporation to open more stores in Korea. During 1995-1996, Daegu and Daejeon stores were opened. In 1996, the CIO moved to the Credit Card business unit of S Corporation as CEO.

4.5 Years of the Changes

Before Uruguay Round became effective in 1996, the management in S Corporation benchmarked Taiwan, Malaysia, Indonesia and Singapore and observed that Wal-Mart, Carrefour and Marco ranked as number one or two retailers in those countries. They realized that to compete with the foreign retailers, information systems are important and, in particular, the POS system is important for merchandising.

As Uruguay Round became effective in 1996, foreign businesses were allowed to have no limitations in both the number of stores and the size of each store. In 1996, Carrefour Korea started its first operation in Korea. In the same year, the CEO¹⁾ became the head of COMPANY C. Threatened by the opening of Carrefour Korea, COMPANY C had to start chain oper-

1) The CEO led the COMPANY C during the big expansion period up to 120 stores.

ations to achieve the economy of the scales and cut the costs of their operations. COMPANY C set up the Logistics Center in Yongin. At that time, the number of COMPANY C stores was less than ten.

In 1997, the Asian Financial Crisis occurred and the Korean economy went under the control of the IMF. The luxurious market of S Department Store diminished in sales. S Corporation saw COMPANY C as an opportunity during the financial hardship of the country and decided to make an aggressive investment into COMPANY C. Although Price Club in Daegu and Daejeon ranked number two and three in sales, S Corporation decided to sell Price Club stores and the Credit Card business unit to obtain 25 million dollars in cash and poured the cash into COMPANY C. The land sites originally developed for the construction of the department stores were changed to build COMPANY C chain stores. COMPANY C also bought 20~30 additional land sites in major commercial areas at a lower price than the usual market price due

to IMF situations. S Corporation set up EandC to construct more stores and IandC to provide IT service for S Corporation. On the 1st of May, 1997, the CIO became the first CEO of IandC.

Wal-Mart Korea was scheduled to open in 1988. COMPANY C panicked about the fact that the number one retailer in the world would start its operation in Korea. COMPANY C diligently benchmarked Wal-Mart and other discount stores in Japan and realized Wal-Mart's limitation (i.e. lack of the fresh food products). In 1997, after a benchmarking trip to Japan and the USA, COMPANY C decided to completely subsidize the fresh food section to have buying power and develop the cooked food section [Meng, 2007]. Based on Confucian culture, Korean housewives like to buy fresh vegetable and fish whenever they go shopping. In addition, due to the expected woman's participation in economic activities, the cooked food section was expected to grow. To induce customers to make frequent trips to the stores, COMPANY C determined to focus on fresh food distribu-

<Table 3> Overview of COMPANY C

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| <ul style="list-style-type: none"> • 1993 COMPANY C opens • 1996 Uruguay Round <ul style="list-style-type: none"> - Foreign businesses were allowed to have no limitations in the number of stores or the size of each store • 1996 Carrefour Korea opened • 1996 COMPANY C started its chain operation • 1997 Asian Financial Crisis (Under IMF) <ul style="list-style-type: none"> - Aggressive investment into COMPANY C - Sold Price Club and Credit Card business units and obtained 25 million dollars cash - Poured the cash into COMPANY C - Sites originally developed for department stores were changed to COMPANY C - Bought 20-30 additional sites in major commercial areas at lower prices due to IMF - Set up EandC to build COMPANY C stores - Set up IandC for IT service • 1998 Wal-Mart Korea opens • 1999 COMPANY C focused on fresh food distribution to be its core competency |
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tion. COMPANY C perceived that the success of the firm in the Korean market depends on fresh food distribution. In 1999, COMPANY C declared fresh food distribution to be its core competency [Seoul Economy, 2003].

4.6 Confucian Ethics and Korean Women

Confucian ethics are characterized as complete royalty to a hierarchical structure of authority. Strict rules of conduct, involving complete obedience and respectful behavior within superior-subordinate relationships such as male-female, parent-children, old-young, and teacher-student have impacted on women's lives in Korea. The Yi Dynasty (1392~1910) reinforced patrimonial institutions rooted in the family as the basis of the smooth governance under the Confucian ideology. As indicated by Dr. Kim Young-chung, a professor of History at Ewha Womans University, Korean women have followed Confucian family ethics, which dictate the man is responsible in public affairs and the woman is responsible in the family :

“The wife was responsible for the education of the children, especially girls up to the age of marriage. There were no educational institution for girls, and the mother assumed the role of teacher ... her influence was not limited to her daughter's upbringing. She was often honored and awarded for her model behavior and contribution when her husband or sons were successful in public life.”

As indicated above, a Korean woman could only obtain social recognition as the wife of a prominent man or the mother of a successful

son. With the opening of Korea during the last quarter of the nineteenth century, the Korean people began to establish contact with the outside world. The first formal educational institute for girls, Ewha Hakdang (Origin of Ewha Womans University) was established. By the beginning of the 21st Century, Korean women were participating in politics, social justice and equal rights. Confucian ethics still have a wide impact on the modern life of women in Korea.

4.7 Strategic Alignment

The CEO of IandC (i.e. the CIO) always thought that the discount store business is a system business. As the number of the stores increased between 1997 and 1998, the CIO emphasized to the CEO that since the discount store business is the system business, the system should lead the business. In the previous job site, the CEO and the CIO worked on the same IS projects in which the CEO participated as business side personnel. In this regard, the CEO seemed to consider that he knew IT very well.

In 2000, when COMPANY C had about 15 stores, COMPANY C decided to develop a system that could be used even when COMPANY C has 100 stores [Meng, 2007]. The CIO advised the CEO to hire an IS advisor. After the CIO's presentation on both the Wal-Mart Information Systems (IS) and the Itoyokado IS, COMPANY C decided to contract a former IS director of Itoyokado instead of a former IS employee of Wal-Mart as a consultant.

Once a month, I and C held a 4-day consulting workshop with the consultant. In the workshop, both the previous-month achievement and the next-month plan were presented. At the workshop, all the business directors of COMPANY C along with all levels of IandC's management in charge of COMPANY C attended. After the workshop, an executive board meeting was held to approve the plan.

In the discount store industry, one of the CSF (critical success factors) is MTO (Merchandise Turnover = annual revenue/inventories; a large ratio means a faster flow of the merchandise). To maintain a higher MTO, a firm must have a higher revenue and a smaller inventory and an accurate and just-in-time inventory replenishment. Since discount stores sell so many products, the orders should be made completely by IS. The inventory on the shelf must match with the inventory amount in the system. The inventory replenishment capability is an essential part of the overall process of keeping store shelves filled while minimizing inventory and purchasing in truck-load quantities [Stalk et al., 1992]. To implement this capability, superior IT systems are essential, which connects the vendor's supply operation with the store's distribution network. The IT system minimizes inventory and allows significant cost cutting.

In order to develop One-Day Fresh-Food Distribution Capability (from harvest to the consumers), COMPANY C needed an efficient process, efficient information system, and good suppliers. The main components of One-Day Fresh-Food Distribution Capability include :

- GOT (Graphical Order Terminal) system
- Fresh Food Delivery System
- Wet (product) Distribution Center
- Mobile Buying System

Each is described below.

GOT (Graphical Order Terminal) System

To maintain freshness, COMPANY C had the policy of "Everything has to be sold within a day" for the fresh food and cooked food sections. COMPANY C needed a system with which the sales team in the store can place orders accurately based on the sales data, real-time weather information and customer preference of each store. COMPANY C developed the GOT system that allows each store to order inventory, which is then reviewed by the headquarters to provide feed-back. Through the graphical presentations of the inventory fluctuation, the trend analysis and real-time weather forecast, the GOT system facilitates the ordering of the inventory by the sales team in the store. Using the GOT system, every store can order based on weather, sales and customer preference of each store. The GOT system is easy to use. With only two days training, even the house-wife employees who are generally considered to be less proficient in using technology can be trained.

Before the development of the GOT system, the IT team brought the sales and inventory data to the sales team every morning and took them back every evening. However the sales team ignored the data due to the complexity of understanding the data [Meng, 2007]. COMPANY C continuously educated the employees

to place orders 100% automatically using the GOT system. The Customer Care system in COMPANY C was developed to have synergy effects with the GOT system. The system facilitated gathering customer voices to provide appropriate products and services that the customer wanted. COMPANY C diligently educated the employees about the importance of customer voice.

Thanks to the GOT system, MTO of COMPANY C was 34.7 compared to 19.2 of Carrefour and 14.7 of Wal-Mart. While Carrefour's operating costs for the sales were over 17%, COMPANY C's costs were about 12% [Meng, 2007]. The cost minimization is critical for discount stores.

Fresh Food Delivery System/Wet Distribution Center

The implementation of the fresh food distribution capability involved structuring the business processes by which fresh food sources are identified, bar-coded, transported and delivered to the stores directly or via the Wet Distribution Center with the Cool Chain System. Empowerment of the buying specialists and proactive collaboration between the specialists and the distributors in a timely manner were also essential for the implementation of the fresh food distribution capability.

Mobile Buying System

Using the Mobile Buying System, COMPANY C buyers could order products at the production site and send them to the store with a bar-code attached using notebook computers. It takes

one day from harvest to the consumer. When the production sites are close to the stores, the goods could be delivered to the store within 3 hours.

4.8 Major Competitor : Wal-Mart Korea

Wal-Mart is the world's largest retailer, operating in 15 countries with 8500 stores. Its revenue in 2009 was \$408 billion. Wal-Mart initiated its international expansion in the early 1990s for the following reasons:

- market saturation in the US market
- other retailers followed Wal-Mart's strategy
- not much difference in price between Wal-Mart and other retailers
- consumer's incentives to visit Wal-Mart became weak

Wal-Mart's international sales had grown from 9% of Wal-Mart's total sales in 1998 to 22% in 2007. The international sales succeeded in Mexico, Canada and the UK but failed in S. Korea and Germany. Wal-Mart Korea started its operation in Korea in 1998. From 2000 to 2003, Wal-Mart Korea was a success with 14 million dollars revenue per year with a total of 16 stores and 3356 employees. However, Wal-Mart Korea lost about 10 million dollars in 2005. In May 2006 Wal-Mart Korea finally decided to exit from the Korean market by selling 16 stores in Korea to COMPANY C. For COMPANY C, 2006 was also the year to open its 100th store. Carrefour also exited the Korean market.

Wal-Mart insisted a global policy such as warehouse-look stores and ignored Korean consumer's preferences. The following is an excerpt from the CIO :

"Wal-Mart headquarters' less-data open policy lead to the lack of localization. In Korea, the fresh food would have to be ordered as many times per day as possible and toilet paper would have to be ordered as many times per day due to the lack of the storage space. The order in discount store has to be based on information systems. Suppose Wal-Mart's existing system has 3-day lead-time. Then someone in Wal-Mart Korea has to open up information system to change their existing system to order the fresh food as many times per day as possible. But it did not work that way."

The following is an interview with the founder and CEO of COMPANY C [Meng, 2007] :

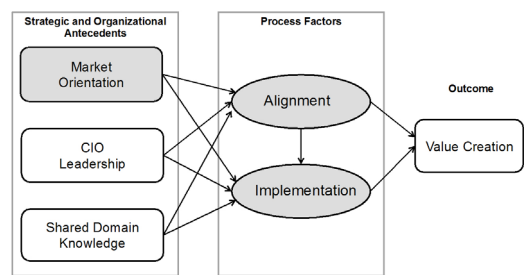
"Instead of mimicking foreign cases, we tried to listen to what customers want. While Carrefour Korea and Wal-Mart Korea did what the mother companies said, we tried to look for what the customers wanted. We listened to the customers as long as it was profitable. Wal-Mart focused on package products because dealing with vegetables and fish is not profitable. Often fresh food is called moneyless MD (merchandise), which means not profitable items.

Korean housewives like to buy fresh vegetables and fish whenever they are shopping. To induce the housewives' travel to COMPANY C, we had to sell those items. We subsidized the fresh food section 100% and also

started to sell the cooked products like Bulgogy. We wanted the fresh food distribution to be our core competency."

5. Case Findings

As a result of this study, the research model is derived as shown in <Figure 1>. Each construct is explained in the subsequent sections.



<Figure 1> Research Model

5.1 Market Orientation

A firm's ability and will to understand the importance of utilizing information and knowledge about customers and competitors is defined as market orientation [Glazer, 1991]. It is reported that market orientation enables a firm to develop strategies more effectively and efficiently than their competitors [Jaworski and Kohli, 1993; Narver and Slater, 1990]. Thus, the firms with a market orientation tend to produce a market offering for a certain segment more successfully than their competitors because such firms would better understand and meet customer needs than competitors.

This study indicates that COMPANY C understood their customers, Korean housewives. They understood that Korean housewives like to buy fresh vegetables and fish whenever they

go shopping. They understood that the success of the firm in the Korean market depends on fresh food distribution capability. COMPANY C not only understood the customers but also their competitors. COMPANY C benchmarked Wal-Mart and other Japanese discount stores. They identified that Wal-Mart's limitation was the lack of focus on fresh food products.

5.2 Alignment of Business and IS Strategies.

COMPANY C understood Korean customers and their cultural and social background. They understood not only the customers and the competitors, but also Critical Success Factors (CSFs). They knew that the competitive edge of discount stores come from IS-based low-cost chain operation and IS-based just-in-time inventory replenishment. They not only knew the CSF of the industry but also the CSF of their company in the Korean market. That is, to have One-Day Fresh-Food Distribution Capability.

"CSF analysis is a most effective technique in involving senior management in developing IS strategy, because it is wholly rooted in business issues and in gaining their commitment to proposed IS actions that contribute to achievement in critical areas. CSF analysis enables linking of candidate IS projects through CSFs to objectives, and thus clearly demonstrates alignment with the business strategy, and provides a compelling basis for gaining wholesale agreement by the top-management team [p. 209, Ward and Pepper, 2002]."

In 2000, COMPANY C decided to enhance their IS-based capability and contracted a for-

mer IS director of Itoyokado as a consultant. The business directors of COMPANY C were involved in the process of developing IS strategies during the monthly workshop with the consultant. An executive board meeting to approve the plan from the workshop followed this workshop. This indicates that the IS strategy development process was clearly understood by business executives and managers, IS strategies were rooted in business issues, and consensus of the senior managers was achieved on IS strategies. In turn, investments made in information systems and technology were directed toward the achievement of business objectives and plans.

5.3 CIO Leadership

As the use of IS (Information Systems) directly influences a firm's competitive position, leadership of the CIO has been emphasized. According to Chen [2010], the CIO needs to have both supply-side leadership and demand-side leadership. While supply-side leadership leads the IT function to exploit existing IT resources to meet business needs, demand-side leadership leads the entire firm in exploring IT-enabled innovations and new strategic opportunities. Enns et al. [2003] and Lane [2003] emphasize demand-side leadership of the CIO. They assert that the CIO needs to provide thought leadership to other top executives, making them aware of the potential for information systems to support and enhance the strategy of the firm.

The CIO of COMPANY C started as an IS

personnel. A series of IT projects earned him respect and trust from peers and other executives. Based on experiences in demand side and corporate role leadership as a CEO, he could gain deeper business insights, contribute to shaping business strategy, and translate business strategies into action plan.

5.4 Shared Domain Knowledge between Business and IT Executives

In the IS literature, shared domain knowledge between business and IT executives knowledge is considered to facilitate communication between business and IT executives [Cohen and Levinthal, 1990]. Thus, it improves the ability of IT and business executives to understand and be able to participate in the other's key processes and to respect each other's unique contributions and challenges [Reich and Benbasat, 2000]. In turn, shared domain knowledge improves IS alignment [Reich and Benbasat, 2000]. Empirical evidence is reported, indicating the importance of shared knowledge for IT-line manager partnerships [Henderson, 1990], for IT performance [Nelson and Coopriker, 1996] and for IT use [Boynton et al., 1994].

Based on (1) the CEO's experiences in IS side, (2) the CIO's experience in business side, and (3) the relationships between the CIO and the CEO working on the same IS projects, the CIO could obtain strong support from the CEO. This ensures that business and IS strategies are integrated. This is consistent with the findings of Luftman [2000]. According to Luftman [2000], achieving alignment is evolutionary and

dynamic, requiring strong support from senior management, good working relationships, strong leadership, appropriate prioritization, trust and effective communication as well as a thorough understanding of the business and technical environment.

The following propositions can be derived as results of this study :

Proposition 1 : Higher Market Orientation is associated with (a) better alignment and (b) better implementation.

Proposition 2 : Greater CIO leadership is associated with (a) better alignment and (b) better implementation.

Proposition 3 : Greater shared domain knowledge is associated with (a) better alignment and (b) better implementation.

Proposition 4 : Better alignment is associated with better implementation.

Proposition 5 : Greater value created from the strategic capability is associated with (a) better alignment and (b) better implementation.

6. Conclusions

This study found the research model and propositions that would help understand the underlying process of developing IS-based strategic capability according to a national context. This study emphasizes that IS strategy is one component of the business strategy and, as such, must be integrated with business strategy. For a multi-national corporation, the whole enterprise is unlikely to be similar in terms of

its products, markets and strategies. Each national unit is likely to have very different business needs. Thus, an IS strategy that meets one unit's needs is not likely to be optimal for another's. Even when the individual units are very similar, they are still likely to have different IS priorities. National-level IS strategy tightly coupled with business objectives permit the firm to achieve more long-term benefits.

The limitation of this study is that the findings can not be extrapolated to all organizations due to the characteristics of the one case. For future studies, the usefulness of the proposed research model across companies, industries and nations needs to be tested to generate theory with rigor. According to Kieser (1994), theories can be generated in a constant dialogue with the historical data. Using multiple historical cases, theory that possibly contains causal mechanism can also be generated.

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