Globalizing Information Systems Alignment : Strategic Thrust and Local Responsiveness

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Abstract

Environmental differences across countries such as socio-cultural, political, economic, and technological differences require business strategies of multinational corporations to vary business practices across regions. Despite the keen awareness of the necessity for strategic adaptation to local context, IS management and strategy tend to remain similar across countries. One of the reasons is to maintain the stability and compatibility of information technology infrastructure. After a careful observation of retail business practice, this study finds IS strategy should also be highly responsive to the local context. This study shows how information resources including systems architecture, processes, human resources, and national context are interlinked together. Despite global excellence in general systems management, failure in such alignment can be a serious problem in extending competitive advantages across regions. This study aims to reveal issues to be taken care of in order to accomplish global technological alignment. Results of this study provide senior management with guidelines and a framework for aligning IT with regional strategic thrust that can improve local responsiveness of multinational companies.

Keywords : Local Responsiveness, Global Business, Strategic Alignment, Localization

1. Introduction

In 2006 the world-class super excellent retail giant Wal-Mart astonishingly announced its closure of business in Korea after several years of difficulty in leading the global expansion into this fast growing market. After a couple of years, while the shock from the surprising news is still vividly lingering around, another world-class French retailer, Carrefour, announced that it would close its business in Korea after selling all the stores to a local player.

Several local newspapers and trade magazines dealt with the issue. But only rumors and superficial street-science interpretations had been presented and the issue was buried ignored. One minority interpretation accused the nationalistic preference of local customers toward local brand. However, after a careful review of the phenomena we found that a more systematic research has a potential to reveal some important learning. Interpretation toward patriotic purchasing behavior of consumers is considered far from the appropriate understanding of the events. A British retailer successfully expanded its business in Korea to make it the second largest player in retail industry in the country. And the warehouse-style multinational retailer, Costco, also expanded its business very successfully in Korea. One store of the Korean branch of Costco recorded the highest sales among all Costco stores throughout the world including the ones in North America. These successes of multinationals made the conundrum a more interesting and complicated one.

In addition, the market leader, e-Mart, was only three-year old local player by the time when Carrefour opened its Korean business. E-Mart barely settled down after an extensive benchmarking and learning from American and Japanese retailers and was still learning and growing, making it an image far from the strong local muscle fighting against multinational intrusion. What then in the world has happened in this market? This was the initial question which motivated us to launch this research. We aimed to find a more plausible and systematic explanation.

In a short interview with a former executive manager of e-Mart, their advantage in the use and management of information technology (IT) and information systems (IS) was mentioned. This talk caught both the researchers' attention. As professors in the field of management information systems, we knew that Wal-Mart was known for its high commitment in the use and application of information technologies. Wal-Mart story, in the classroom and in practice, has always been considered the case of excellence in the use of technology. Wal-Mart cases describe their aggressive investments into advanced information technologies. We were using the Wal-Mart story to teach excellent business practices in the business school. It didn't make sense to us that an infantile stage local retailer had an advantage in the use of corporate information technology in comparison to the global excellence.

Furthermore, according to the manager, the company learned the overall business model of mass merchandising and the system architecture from benchmarking and consulting Japanese and American retail industry and experts. They

were supposed to be in the process of learning yet. In addition, Wal-Mart and Carrefour is still leading excellence in many other countries including their home countries. Such fact led our belief that the key to the success and failure of their business should not be their intrinsic competence and robustness of the business model and management practice. And as the reputation of Wal-Mart and Carrefour as leading retailer is well recognized among Korean consumers, the brand reputation itself should also not be the matter of issue.

From this interpretations and conjecture, we decided to examine a more subtle aspect of local responsiveness of the multinationals. Localization should be a more complicated business transformation beyond localized marketing, advertising, and branding. Based on such perspective, we decided to carefully explore the systematic local responsiveness of the retail business. As the two companies are not doing business anymore in Korea, we determined to examine the two leading survivors: e-Mart and Tesco. Qualitative studies of these companies were performed with a focus on their localized business practice and the use of systemized technology. Our finding, overall, pinpoints the importance of local responsiveness in the management of technology as well as and in harmony between the organizational local responsiveness and the use of technology.

2. Theoretical Background

The concept of local responsiveness is related at least to three theoretical perspectives. These are system structural paradigm emphasizing on environmental fit [Astley and Van de Ven, 1983], resource-based view on the design and implementation of business strategy [Barney, 1991], and the strategic alignment of the use of information technology [Henderson and Venkatraman, 1999]. We resort to these three theoretical perspectives in pursuing our examination of the success of retail business in Korea.

2.1 System Structural Contingency

Chandler's seminal work on strategy [Chandler, 1962] focuses on the relationships between organizational environments, strategy, and structure. He asserts that an organization's environment shapes the scope of viable strategic domain. He further suggests that companies whose structure matches their strategy become more effective than mismatched firms. Chandler emphasizes the importance of employing strategies and structure according to the distinct environmental contexts in obtaining competitive advantages and business performance.

MNCs (Multinational Corporations) operate their business in many countries. Business branches are established under diverse national contexts. For this reason, each national branch faces different business environments and issues. The environmental differences come largely from disparities in cultures, political systems, economical systems, legal systems, available national resources, and the level of economic development [Hills, 2009]. Such differences across countries require that local businesses of an MNC vary their strategic approaches country by country

while maintain global consistency. The degree of localization naturally varies across companies and across functions. Consumer oriented businesses are exposed to local culture more extensively than industrial goods businesses. Boundary spanning functions working at the interface of an organization toward its environment, such as sales and marketing, are considered more sensitive to local culture and context than core technology and infrastructure.

Corporate information systems function is considered to serve as a back-office function and less sensitive to localization factors. Information technology as a stable technological infrastructure is emphasized to support diverse business activities across functions and across regions [Broadbent and Weill, 1997]. Localization of the use of information technology has been related to local legal and technological constraints and availability of resources. However, as Konsynski and Karimi [1991] pointed out, a firm's global IS strategy needs not only to address coordination needs for global operation but also to address strategic local issues. Despite such sporadic advices, CIOs (Chief Information Officers) of MNCs mostly tend to focus on technological compatibility and inter-operation. They find it not significant and difficult to fully identify and understand local specificities nor rectify the architecture and applications accordingly.

The implications from the system structural contingency theories were drawn to incorporate the following issue in this study :

- local conditions and contexts that may affect local operation and the choice of strategy

2.2 Strategic Capability : Resource-Based View

Resource-based view (RBV) of strategic management focuses on a firm's strategic resources and capability as the source of competitive advantages. Among all, the capability that distinguishes a company from its competitors is defined as strategic capability [Stalk et al., 1992]. An example could be Wal-Mart's Inventory Replenishment Capability. RBV considers that organizational capabilities are embedded in management practices, business processes, available physical and relational resources, and organizations' ability to use technological system. For this reason, this perspective naturally focuses on the infrastructure that supports the capabilities [Stalk et al., 1992].

The business processes of an organization are considered as one core building block of corporate capability. New organizational capabilities can be created through coordinating existing capabilities or acquiring new capabilities [Hitt et al., 1998]. The process of forming capabilities through arranging existing skill sets is referred as 'bundling' of resources [Sirmon et al., 2007]. Capabilities can also be formed through the reconfiguration of existing resources through acquiring and developing new resources [Uhlenbrcuk et al., 2003; Sanchez, 1995]. Skills and capabilities are also considered as organizational factors that affect organizational structure such as functional groups and technological ability (e.g. printed circuit board assemblage) [Galunic and Rodan, 1998].

Resource-Based View (RBV) argues that long-term success of an organization is closely related to the alignment of organizational resources and

capabilities to match the demands from the environment. Inimitable and non-substitutable resources and capabilities are believed to drive value creation and sustainability. The skills and knowledge of the human resources coupled with other resources like information technology infrastructure and organizational processes forms organizational innovation capabilities such as creative information services and effective research and development (R&D) [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].

As this study focus on the management of information systems, based on the perspective of RBV theories we find it important to incorporate the following issue :

- the nature of IT configuration, business processes and other organizational resources related to strategic capability of local units.

2.3 IT Alignment to Business Strategy

An effective use of information systems and information technologies is considered to have a profound influence on a firm's competitive position. A desired way to achieve strategic benefits from IS/IT is to make IS as one core aspect of strategic and managerial solution to impending business problems and environmental challenges [Earl, 1992]. Consequently, it is advised that IS strategies should be in harmony with business strategy throughout the whole process from the design of strategy to the implementation of it [Ward and Peppard, 2002].

Despite such recognition on the importance of strategic alignment of IT/IS the IS planning process tends to suffer from such problems as (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 [Teo and Ang, 2001]. The lack of alignment between IS and business strategies can result lost business opportunities important for the betterment of the performance and the future of the company [Henderson and Venkatraman, 1999].

Strategic IT alignment research emphasizes the understanding of the process of aligning and assimilating information technology into business context. One major impairment factor that cause the misalignment between business and IS is the perceptual gap between strategists and technologists [Pepper and Ward, 1999]. As Sauer and Willcocks [2002] point out "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 knowledge and understanding between IT and business executives is considered to improve the communication between IT and business function and facilitate the alignment between business and IT planning [Reich and Benbasat, 2000]. Despite the lingering emphasis on the importance of communication and harmony, strategic alignment of information technology with business goals remains as one of the core issues with regard to the management of IT [Luftman et al., 2007; Huang and Hu, 2007].

In the case of MNCs, business strategy varies

by region or by country due to differences in culture, legal and political systems, economic and developmental contexts [Hills, 2009]. Despite the needs for solid, stable and consistent technological infrastructure at the corporate level across region, there is also a strong pressure toward the incorporation of the regional strategic differences into the design and implementation of specific IS/IT strategy.

The implications from the strategic alignment of IT research were drawn to incorporate the following issues in this study :

- the processes taken to align business needs and the provision of IS support
- strategic and organizational antecedents related to the facilitation of the alignment process and the process of assimilating IT to local structure and strategy
- problems and challenges of strategic IT alignment of multinational business, which businesses in one domestic environment do not normally confront.

3. Research Method

This is a revelatory case study with a historical perspective. A revelatory case study is appropriate for studying the evolutionary complexity of a phenomenon [Yin, 1994]. Since IT-based strategic capability is the product of the interplay between business environment and the agent's (e.g. CEO/CIO) responsive or proactive decisions and technological choices made in the past [Fredrickson, 1986; Kieser, 1994], the developmental process of such organizational configuration can best be understood by taking the his-

torical approach. Further, the evolution of business settlement and growth can be studied via historical and interpretive analyses of events and actions taken by agents operating within a specific socio-economic environment [Mason et al., 1997; Zahra and George, 2002]. Historical understandings can also provide high-valued knowledge which can be used appropriated by decision makers across temporal differences [Neustadt and May, 1986].

According to Eisenhardt [1989], a priori specification of constructs based on extant literature assists the design of case research and helps link the collected data to the questions of a study. Following afore mentioned advice for the improvement of construct validity of cast approaches, potentially important constructs were identified from exiting research and multiple sources of evidence were employed to prove the constructs [Yin, 1994; Eisenhardt, 1989]. Based on previous research on strategic alignment between IT and business arena and organizational theories related to environmental adaptation and strategic capability, the organizational and environmental variables to be considered were identified and used in our case analysis of two companies chosen for this research via theoretical sampling [Glaser and Strauss, 1967; Eisenhardt, 1991; Lipset et al., 1956]. Efforts were also deserted to elicit detailed research procedures and to document the research process as part of an attempt to improve reliability of the study [Yin, 1994].

The data collected involves major developments of the two companies' capability by way of using information technologies. Data were collected from various sources including interviews,

〈Table 1〉 Research Design

Eisenhardt's step [1989]	Study design of this research
1. Definition of research question	The 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 proved throughout interviews and review of documents.
3. Selection of cases	Two companies were selected from an initial pool of multiple case sites.
4. Multiple data collection methods	Interviews, corporate publications, project documents and various trade publications are used to draw rich and diverse interpretations.
5. Analyses of data	Similar to the approach taken by Quinn [1980], a teaching case for the companies were developed as a prelude. This approach provided the researchers with an enhanced familiarity to the case being analyzed.
6. Generating propositions or hypotheses	Generative propositions were elicited from the case analysis.
7. Enfolding literature	Compared the research outcome with existing management and IS literature.

corporate publications, project documents, and several trade publications. We aimed to present generative propositions drawn inductively, which can guide a more structured future studies. The following table demonstrates the procedural design of this study juxtaposed with the recommendations by Eisenhardt [1989].

4. Case Studies

4.1 e-Mart

4.1.1 The beginning

In 1993, the first e-Mart store branch opened in Seoul. It was 2 years after the agreement of Uruguay Round to open up Korean retail industry to foreign business with 5 years of grace period. After the agreement Korean government passed a new market legislation to allow stores with big floor size. Up until 1990, stores with bigger than 100 pyung (a Korean unit of size, 1 pyung is 3.3 square meter) is not allowed. The reason was to protect small and micro merchants and

mom-and-pop corner grocery from large corporation.

However, due to the Uruguay Round, global retail giants are allowed to do business in Korea from the year 1996 without limitations both in the number of stores and the size of each store floor. The new legislation was the request of the Uruguay Round and was supposed to prepare Korean companies to face open market.

e-Mart was the first of its kind in Korea, a large scale discount score, meaning the lack of history and experience among Korean companies in such business model. Shinsegae Department Store was the mother company of e-Mart. Shinsegae was established in 1930 as a store of the Mitsukoshi Department Store of Japan. Shinsegae developed expertise and know-how in running luxurious department stores, but was new to mass-merchandising discount store.

In 1996, as the retail market of Korea opened as planned according to Uruguay Round, Carrefour Korea started its first operation in Korea. Threatened by the opening of Carrefour Korea,

e-Mart started chain operation by expanding branch stores. The chain operation with several stores aimed to achieve economies of scale to enable low-price strategy by saving operational costs. E-Mart also set up a logistics center in Yongin, a satellite town located 50 kilometers away from the center of Seoul. By the end of 1996, however, the number of e-Mart stores was still only less than ten.

4.1.2 The Expansion

In 1997, the Asian Financial Crisis incurred a massive industrial restructuring under the guide of IMF. The luxurious market spending shrunk, and thus, so did the business of Shinsegae Department Store. E-Mart was considered as an emerging opportunity to economize the financial hardship of the country. The Corporate Shinsegae decided to make an aggressive investment into e-Mart by cashing on Price Club Korea.

Shinsegae quickly introduced Price Club from the US as the Korean market law changed to allow new business models. Shinsegae agreed to pay 3% of their revenue to the head quarter of Price Club and opened the first store in Yangpyung, Seoul on the 15th of September, 1995. The Price Club Yangpyung store was a great success. The sales ranked number one among all 6000 Price Club stores. The head quarter of Price Club requested Shinsegae to open more stores in Korea. The Price Club stores they ran few years made stories of good success.

Although the business was good and learning from the experience was impressive, Shinsegae decided to sell Price Club stores to the Price Club USA to focus on the growth of e-Mart. The sales of the Price Club stores and the Credit Card business unit, which Shinsegae operated until then, created 25 million dollars of cash investment capability.

Shinsegae invested all the cash resource into the expansion of e-Mart. E-Mart could acquire about 30 additional land sites in major commercial areas for a good price as the real estate price was lowered due to the financial crisis. In addition, the land sites originally developed for the construction of the department store branches were converted to build more e-Mart chain stores.

4.1.3 Competitive Thrust

Facing the planned launch of Wal-Mart in Korean market scheduled in 1988, e-Mart needed to cope with the challenge to compete against the number one retailer in the world. They tried hard to analyze and benchmark Wal-Mart as well as discount stores in Japan. Realizing that Wal-Mart focus more on industrial products and commoditized food products such as canned and packaged food and snacks, e-Mart decided to strengthen the preparation of fresh food items including fruits, vegetables, meat and fish.

Traditionally stores for fruit, vegetable, meat, and fish were separate in marketplaces. E-Mart decided to collect all such items in one store. Such practice was new to Korean consumers. E-Mart needed to find ways to attract housewives from traditional stores.

Housewives in Korea were in charge of cooking and nutrition of the big family members and were expected to keen at the taste and freshness of food ingredients. Finding the right

ingredient was educated from mothers to daughters and daughters in law. Consuming pre-processed food products was considered the avoidance of the role of 'good mother or wife'. Grocery shopping had the prime importance and the purchase of industrial products was the next. Preparing fresh food ingredients acceptable by sensitive housewives would frequent customer's visit and would be extended to the purchase of other products.

E-Mart believed that the success of the company competing against Wal-Mart would depend on the success of fresh food supply. By 1999, e-Mart formally declared fresh food supply as its core competency and highlighted it as the focus of marketing and advertising [Seoul Economy, 2003]. E-Mart aggressively invested

〈Table 2〉 Overview of e-Mart History

- 1993 e-Mart opened
- 1996 Uruguay Round
    ✓ Korean retail market opened to foreign businesses
- 1996 Carrefour Korea opened
- 1996 e-Mart started chain operation
- 1997 Aggressive investment by e-Mart
    ✓ Use Asian Financial Crisis as an opportunity to grow.
    ✓ Sold Price Club and Credit Card business units to obtain cash
    ✓ Sites planned for department stores were redirected to expand e-Mart
    ✓ Set up I&C for IT service
- 1998 Wal-Mart Korea opened
- 1999 e-Mart started to focus on developing core competency
- 2006 Opened 100th Store; e-Mart acquired Wal-Mart Korea; Won 'THE KOREA's Most Admired Company' prize awarded by Korea Management Association
- 2009 Launched online e-Mart mall
- 2013 Opened 150th store in Korea2010

into the preparation of the system and process for fresh food replenishment.

At the same time, the number of working women was also increasing. However, working women did not want eagerly go for process and canned food products. Instead, they wanted fresh cooked meals and side dishes. As the fresh cooked food section was expected to grow, e-Mart decided to develop and extend the cooked food section [Meng, 2007].

4.1.4 Information Technology and Strategy

In the meanwhile, e-Mart found the IT support of the business strategy was of prime importance. One major success indicator of retail store is MTO (Merchandise Turnover = annual revenue divided by inventories) A large MTO ratio means a faster flow of the merchandise. To obtain a high MTO, establishing just-in-time inventory replenishment is considered crucial as it help minimize the level of inventory. Due to the enormous diversity of product items, orders should be made completely by IS. The inventory on the shelf should match with the inventory amount in the system. The inventory replenishment capability is an essential part of shelf management to minimize inventory and stock-out at the same time. Sophisticated IT systems are essential to connect the vendor's supply operation with the store's distribution network.

In addition, e-Mart found that fulfilling the keen sensitivity to the freshness of grocery product is critical for the success of the business. The strategic focus of e-Mart emphasized that all grocery products should satisfy high-speed processing. They decided to limit the duration

of product flow between producers and consumers to 24 hours. In order to develop the capability for the One-Day Fresh-Food Replenishment from producers to consumers, e-Mart needed an efficient process and good supplies, and most of all high quality information system support. The main components of One-Day Fresh-Food Replenishment Capability of e-Mart included :

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

The GOT system provided graphical presentations of the inventory fluctuation, the result of trend analysis and real-time weather forecast. It also allowed each store to make orders dynamically. The implementation of the fresh food distribution capability involved restructuring of 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. E-Mart procurement workers used the Mobile Buying System to make order at the production site and send them to the store with a bar-code attached using notebook computers. The whole procurement process from the identification of producer to the replenishment of the shelf is completed within one day.

4.1.5 CIO and Governance

Shinsegae Corporation spun off an IT outsourcing company for an enhanced and professional IT services. The new S-I&C company launched on the1st of May, 1997 was supposed to provide IT service for all Shinsegae companies. The CEO of S-I&C, Mr. Kwon, played the role of CIO of e-Mart and was supposed to assume the role of IT-based innovation at e-Mart. The CIO's first mission, after joining Shinsegae Department Store in 1983 was to implement POS system. The CIO later assumed the role of the director of the strategic planning team and tried to benchmark discount store's operation of advanced companies in Japan and the US.

After a series of review, they chose to invite a n expert from Itoyokado, a Japanese retail giant. They held a 4-day consulting workshop once a month. All the business directors of e-Mart were supposed to participate along with all IS managers. After each workshop, executive board meeting was held to review and approve monthly IS plan. The strategic alliance between Shinsegae and Price Club was also helpful.

The CIO of e-Mart believed that the discount store business should be led by innovations in information systems. His perspective is well accepted by the CEO, who once was a business partner of the CIO before joining e-Mart. In the year 2000 they agreed to invest into the development of overly sufficient capacity of information systems [Meng, 2007]. The decision was based on their shared understanding and vision on the importance of IT support and the rapid growth of the business.

4.2 Home Plus

4.2.1 The Beginning

Home Plus was established in March of 1995 as part of the distribution division of Samsung,

the largest conglomerate in Korea. Home Plus opened its first store in Daegu in September, 1997 and the second in Busan in January, 1999. Amidst the foreign exchange crisis, as part of the restructuring program the company decided to sell its stake of Home Plus to an international player.

Candidates of preliminary investigations included Wal-Mart, Promodes and Carrefour from France, Ito-Yokado from Japan, and Sainsbury's and Tesco from UK [Kim, 2005]. Tesco was most aggressive as it was looking for opportunities to enter the Asian market. For Tesco, Samsung was considered as a good reputed brand for a successful foot holding in the new market.

For Home Plus, Tesco was considered most attractive partly because of Tesco's enthusiastic response and also Tesco's approach in respect of the local partner's strategy. Home Plus wanted the marketing approaches and customer strategies be tailored to the local culture. Home Plus's approach was well accepted by Tesco. On the other hand, Wal-Mart and Carrefour insisted in the conformation of local operation to the global corporate standard. In the end, Tesco was chosen. After Tesco acquired Home Plus, the name of the company is maintained as planned as well as the management and employees of the Home Plus including the CEO.

4.2.2 The Expansion

After acquiring Home Plus, Tesco decided to maintain the local name and sustained its investment to increase the number of stores. By the end of 2001, 14 stores were operating and by the end of 2003, the number of stress was doubled to 28. By that time a big logics and distribution center was prepared for an efficient operation of the business.

Home Plus found that the exit of Wal-Mart and Carrefour was an opportunity to expand its business. By 2014, Home Plus maintains the position of the second largest player in the mass merchandiser discount retailing industry of Korea in terms of both market share and the number of stores with 139 stores and 28,000 employees. For the 15 years between 1999 and 2014, the number of stores grew by 70 times and the number of employees grew by 24 times.

⟨Table 3⟩ Overview of Home Plus History

- 1997 Opens 1st store in Daegu
- 1999 Opens 2nd store in Pusan
- Sold to Tesco, UK
- 2000 After merger, Home Plus extended by opening a new store in Ansan
- 2001 Opened 14th store
- 2003 Opened 28th store
  Set up the Logistics Center in Mokchun
- 2004 Launched PMS (Product Management System)
- 2008 Acquired 32 HOMEVER stores (HOMEVER is a new name for Carrefour acquired by E-LAND in 2006)
- 2014 Grew to139 Stores and 28,000 employees

4.2.3 Competitive Thrust

Home Plus maintained its local strategy to be responsive to local needs, and pursued operational efficiency and innovation based on IT applications. Home Plus recorded a steady growth via responding to the detailed needs in the design of aisle and product display as well as clean and organized supply of fresh food products. Home Plus tried to provide store environment preferred

by local customers and implemented diverse cultural events which drew attention and produced good impressions to local customers.

Traditional emphasis of Tesco on fresh grocery products was also helpful as it is in the same line with customer needs in Korea. The company tried to provide luxurious shopping environment similar to department stores and differentiable to traditional market places. Aggressive expansion of store branches and sustaining cooperative relationship with suppliers were also considered as one important success factor. The use of IT was also based on similar belief which reflected the needs of local customers and partners.

4.2.4 Information Technology and Strategy

Based on the strategic emphasis of Tesco on local responsiveness, the local initiative of Koran branch was well recognized and supported. At the beginning Home Plus used information systems for Asian countries which were developed by the head quarter and stick to global information system standard of Tesco's UK head quarter. The CEO of Home Plus suggested that Korea would develop and deploy locally developed PMS (Product Management System). After a long discussion, Tesco accepted the development of a new globally usable corporate PMS with localization flexibility requested by Home Plus.

A new regional CIO role was established and Mr. Lee was recruited in 2001 to lead the PMS project. The project was implemented by pooling 150 IT experts from 11 countries including the UK, USA, Canada and India. After Home Plus set up a huge distribution center at Mokchun in 2003, the CIO invited Mr. Park

as a team manager for the PMS project. The two used work together in the distribution division of LG for 3 years. In 2004 PMS project was successfully completed. The new PMS revolutionized product management processes at SKU (Stock Keeping Unit) level. The system later turned into the standard operating architecture adopted throughout Tesco stores worldwide.

Home Plus believed in the importance of fresh grocery product in their business in Korea. The IT group had a clear understanding on such strategic importance. Mr. Park reflected the situation as follows :

"Accurate forecasting and replenishment are needed on an hourly basis instead of a daily basis, especially in the 'fresh' section. The level of accuracy is important. The result of even a slight improvement in accuracy is enormous. To improve accuracy, local operators are to be allowed to develop localized systems for fresh food."

4.2.5 CIO and Governance

The first CIO of Home Plus, Mr. Lee, used to work at the distribution division of LG and IBM Korea. He could successfully draw a strong support from the CEO. The relationship between him and the corporate CIO was also good and collaborative.

His first mission was to lead the 40 million dollar PMS project. In 2005 he became the vice president of Home Plus in charge of IT, operating model, and electronic commerce. At the same time, he was appointed to the Application Development Director of Tesco Asia located in Shanghai, China. He assumed a role to deploy the PMS system

into China and other Asian countries. He sent Mr. Park to Shanghai to help deploy the system in China. Mr. Park returned to Korea in 2010 and became the CIO of the Home Plus as Mr. Lee left the company.

The first CEO of Home Plus used to work at Samsung and Shinsegae Department Store. He had a strong belief in 'glocal' strategy. He emphasized the importance of localizing the global standard rather than sticking to global practices. The company attributed the success of Home Plus in Korea to this glocal strategy [Kim, 2005]. The glocal perspective is also reflected in the remark of Mr. Park, the new CIO :

"The regional CIO should be allowed to suggest localization ideas to the corporate CIO. There was a lot of debate when we asked for the localization of the corporate business practice. Korean group was considered as a rebellion. We never simply accepted new system changes from the head quarter. Instead we tended to offer a counter proposal that may fit better to the needs of Korean context."

5. Extended Observation

5.1 Methodological Consideration

Eisenhardt [1989] emphasizes the importance of emergent understandings while performing data collection in an exploratory research. Exploratory research looking for new explanations and theories should not confine the focus of research into initial model. Rather, researchers "should avoid thinking specific relationship between vari-

ables and theories as much as possible," She also point out the usefulness of multiple observers with different point of view. Similarities as well as differences between cases should also be examined in the course of refining both the definitions of explanation and problem itself. Literature from different disciplines may help draw additional insights into the phenomena.

In this vein, Weick [1989] agrees the importance of "knowledge growth by extension" to find additional insights into emergent research questions. His metaphor toward such "disciplined imagination" is a "puzzle that is gradually solved as more pieces are put into place." He specifically recommended attempting 'middle range theories" that are less formative and are "nearly theories."

While performing this research we focused on findings and explanations that led the success in both e-Mart and Home Plus. While performing the case studies a now curiosity emerged : why e-Mart was more successful than Home Plus up to now? Despite that e-Mart is a home-grown company, their mass-merchandising business model was new to Korean market and Home Plus also ran mostly by local business leaders. In the similar vein, Costco, while it is a very western style business, the company is doing much better than similar home-grown warehouse discount stores. Thus the fact that a company is a home-grown itself cannot be a successful explanation.

With the new set of curiosity in mind we decided to visit the stores to observe consumers and business practices. The researchers individually or together visited e-Mart and Home Plus stores to observe business practice and interview shoppers.

At the same time, we tried to expand our literature base with a hope that explanation from different orientation enriches the research findings. Among all we found that recent approaches in sociology and anthropology on places and spaces could have a potential value in helping us to draw additional insights. As a specific example, French anthropologist Augé [2008] focused on the cultural values of places. According to him, a 'place' is a special type of artificially constructed space. Places such as traditional marketplace near main street or church plaza at the center of a local town have a special historic and cultural value beyond their functional dimensions. He suggested that modern day airports or supermarket have become a 'non-place' which deprived shared cultural orientation from the space.

German sociologist Schroer [2006] tried to extend the perspective of century-old philosopher Georg Simmel by suggesting the 'sociology of spaces.' He defines a place as a socially defined space and the function of it is artificially defined. He finds that the nature of a place such as church or classroom defines the mode of 'socially acceptable' behavior. He emphasize the role of a place as an independent variable to the patterns of social activities. British sociologies John Urry [2007], in suggesting the field of 'sociology of mobility', followed similar perspective. He extended the view on place focusing on the distortion of the nature of places by human action and the use of technology.

Our initial visit to stores and review of the additional literature led us to explore new site. We found it worth to visit traditional marketplaces to understand the differences in transactional practice and customer responses among mass-merchandisers including e-Mart and Home Plus. This conclusion led us to extend our observation further to include traditional marketplaces and interviews with shoppers there.

5.1.1 Result of Extended Observation

Toward the probing on the reason of the choice of shopping place the shoppers interviewed consistently mentioned the convenience in shopping, tagged price (no need for negotiation), quality of infrastructure (air conditioned environment and parking), and reasonable level of prices. These factors were considered the dimensions in favor of mass-merchandisers in comparison to traditional marketplaces. However, mass-merchandisers (e.g. e-Mart and Home Plus) were considered very similar across companies.

Mass-merchandisers had more diversity in product category than traditional marketplace, while traditional marketplaces had more variety within each category than mass-merchandisers. Consumers thought diversity in product category is more important than item variety within a category for shopping convenience. Traditional marketplaces were more specialized within each category (e.g. fruits, vegetables, etc.), but to shop other category products they needed to move to another places.

More importantly, observation of traditional marketplaces and comparison among places helped us to understand the subtle differences among mass-merchandisers. In traditional marketplaces shoppers could taste sliced fruits and vegetables to know the quality of taste and freshness. They

could also ask where the products come from, the towns and farms. These practices were limited to apply in mass-merchandise stores. There were also rhythmic sales calls to allure customers or even show-ups. Some traditional marketplaces even had the tradition to have street shows and events such as puppet shows and cultural events like singing. Traditional marketplace was partly a place for economic transaction and partly a place of socio-cultural interaction.

e-Mart tried to incorporate some of the traditional environment. Rather than focusing on socio-cultural aspect. They deployed tasting carts at the end of aisles or in the middle of path ways. Sales people tended to suggest a free tasting of their products to customers. The tasting items included products from coffee and beverage to fresh cooked beef, pork, and chicken. E-Mart also provided end-of-day sales events which provided a special discount on vegetables, fruits, meats, and fishes. The discount events were very effective to attract housewives. Information systems needed to be flexible enough to support such ad hoc sales activities.

On the other hand, Home Plus focused more on non-transactional cultural events. While Home Plus emphasized cozy, descent, and quite shopping environment within the store, they provided various cultural programs outside of the store. The strategy of Home Plus reminded us with the marketplace tradition in European countries. As Augé [2008] mentions traditional marketplace in Europe was not just a place for economic transaction. The marketplace overlaps with the place of feast.

The approaches of e-Mart and Home Plus are sharply contrasted the approach of Wal-Mart, which focused only on low-price and efficiency. Although Wal-Mart incorporated local practice to install fresh product corner, the level of emphasis by Wal-Mart and Carrefour did not reach the level of emphasis by e-Mart and Home Plus. All the companies emphasized efficiency, the use of ICT, and low price, subtle socio-cultural and transactional contextual differences, which might be considered as a minor small difference, made a big performance difference. Information systems were supposed to reflect such subtle differences. We interpret these differences could only be captured via intimate observation, local experiences, and close communication among CIOs and executive managers. This interpretation could be summarized as "anthropological place theory of retailing."

6. Findings and Interpretations

6.1 Sensitivity to Local Market

Glazer [1991] defines market orientation as a firm's ability and will to understand the importance of utilizing information and knowledge about customers and competitors. Thus, firms with a high market orientation tend to produce market offerings more successfully than their competitors because such firms are able to better understand and meet customer needs than their competitors [Jaworski and Kohli, 1993; Narver and Slater, 1990].

The cases highlight the importance of sensitivity to the needs of local market. With a long historical experience with Korean market through

Shinsegae department store e-Mart had a good understanding of the suppliers and Korean customers as well as the importance of the provision of fresh food products.

Although Tesco did not have an experience with Korean market, the company's pursuit of 'glocal' strategy helped through the provision of strong corporate support to the regional CEO and the regional CIO. The CEO of Home Plus worked previously in a local department store and had a good understanding of the nature of Korean customers and suppliers.

6.2 Communicative Intimacy between CEO and CIO

Domain knowledge shared between businesses and IT executives facilitates communication between business and IT executives [Cohen and Levinthal, 1990]. Such shared understanding improves the ability of both parties to appreciate the others' key processes, contributions and challenges [Reich and Benbasat, 2000]. The shared domain knowledge may improve IT-line manager partnership [Henderson, 1990], IT performance [Nelson and Cooprider, 1996] and active use of IT [Boynton et al., 1994].

In the case of e-Mart, the CEO had experiences in IS projects, the CIO had an experience in business side. In addition, they shared a common experience working on the same IS project. Based on their shared experiences and knowledge, the CIO could maintain a reliable support from the CEO and ensures that business and IS strategies are well integrated.

The regional CEO and regional CIO of Home Plus shared several years of common experience and the CEO recruited the CIO to lead the PMS project. Their shared experiences and relationship created a highly intimate communicative relationship. With the strong support from the CEO and the corporate CIO, he could successfully implement PMS through which the company could realize highly accurate just-in-time inventory replenishment, one core CSF of the business.

6.3 Regional Responsiveness led by CIO and IS-Strategy Relationship

The use of information systems directly influences a firm's competitive position. Chen [2010] suggests that a CIO needs to have both supply-side and demand-side leadership. Supply-side leadership allows the CIO exploit existing IT resources to meet business needs. Demand-side leadership enables CIOs to explore new IT-enabled innovations and strategic opportunities and to make other executives aware of the potential of information systems in support of new strategic thrust [Enns et al., 2003]. With regard to regional responsiveness demand-side leadership of regional CIO is related to innovations and new strategic movement in local market, while supply-side leadership is related to the exploitation of existing IT resources to meet local business needs.

Based on his successful experiences in business side and his corporate leadership role, the CIO of e-Mart could contribute to the shaping of business strategies and translate them into IS action plan. E-Mart understood the importance of local cultural and social background. Based on his experiences in both supply-side and demand-side

experiences, the CIO knew that the competitive edge of discount stores comes from IS-based low-cost chain operations and just-in-time inventory replenishment. Based on their understanding of the success factors in Korean market, e-Mart could develop One-Day Fresh-Food Replenishment Capability.

In 2000, the CIO made business directors of e-Mart involved in the monthly workshop for developing IS strategies. After each workshop, executive board meeting was held for quick approval of the outcome of workshop. IS strategies were supposed to be closely related to business issues to ensure the alignment of business and IS strategies based on the consensus of the senior managers.

Achieving alignment is an evolutionary and dynamic process 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 [Luftman, 2000].

The CIO Lee of Home Plus used to work in the distribution sector of IBM. His past experience with both demand and supply sides of IT was very helpful in leading IT initiatives. Another important factor was that the regional CEO of Home Plus maintained his vision to emphasize the importance of glocal strategy and to recognize the importance of strong IT initiative in their business.

6.3.1 Additional Episode on Responsiveness

The importance regional responsiveness of technological system is additionally confirmed

from Tesco's experience in China. The PMS, successfully applied in Korea, was later deployed to Tesco-China, but was not successful. Mr. Park found that the book value of the inventory did not match with actual level. This problem was very widespread across stores. According to him the mismatch was caused by false recording of inventory level, partly due to the 'guan xi' practice on which China's relationship-based business is oriented. Sometimes replenishment was recorded in the computer way before the actual inventory changes. As a result, replenishment records in the computer did not match what actually happened. He hoped in vein that the inventory management practice in China become more transparent as the PMS was introduced. He mentions that "It is wrong to insist that everything must fit into the rigid system. The formula is system plus process plus people."

He recalls that the process needed to be reengineered to fit to local environment and modifications are required to PMS. He himself and the managers in China failed to persuade corporate executives to reengineer the business process and adjust PMS. As a result the system did not reflect the local business practices in China. The company failed to secure accuracy in forecasting and inventory replenishment. The stores' loss marked 4% on average peaked with 7% loss. In 2013, Tesco China was sold. He attributed the failure to the lack of regional responsiveness. His comment goes on as follows "at the same time, if you insist only on the local tradition, then there will be no improvement. It is important to look for a balance to localize the global standard."

7. Conclusion

The following propositions related to the use of IT/IS in multinationals are drawn from the results of this study :

Proposition 1 : High regional organizational performance is related to high level of market sensitivity and when it is translated into technology design and is reflected in the development of information systems responsive to local needs.

Proposition 2 : High level of communicative intimacy between the CEO and CIO help the regional business to overcome planning formalities and to incorporate subtle modifications which are important to adapt to local culture and practices.

Proposition 3 : Global IT infrastructure and architecture should be flexible enough to incorporate important local cultural values and also be innovative to transform local practices while maintaining local sensibility.

The propositions will help multinationals to re-evaluate the importance of developing strategic IS capability which is responsive to local context. Market situation is unlikely to be similar across countries in every sense including product preferences, customer and supplier practices, and competitive environment.

Each regional unit faces different needs and issues. Overall market and economic trends can be captured by summarized business reports and market statistics. However, certain subtlety related to local cultural sensibility cannot be easily captured. An IS strategy that meets one unit's needs may not be optimal in another. Regional IS strategy should be tightly coupled with such local cultural business contexts.

In order for the regional IS strategy to be aligned with regional business strategy, leadership of the regional CIO should be appreciated. In addition, regional CIO's understanding of local practices, people, and culture should be further scrutinized. Intimate communicative relationship between the regional CEO and corporate CIO will help to incorporate such important and subtle differences. Such localized capability is also important to explore IT-enabled innovations and strategic opportunities of the local market. Shared understandings and perspective of CEO and CIO is also helpful to achieve high alignment between business and IS.

The propositions from this study, however, should be further tested to ensure extended application as this study focused on limited cases. According to Kiesler [1994], theories can be generated in a constant dialogue with the historical data. Using multiple historical cases, theory that possibly contains useful causal mechanism can be generated. Future studies may test the applicability of the proposition in other industries and nations.

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