

Reengineering Selling Chain in Korean Insurance Industry: Opportunities and Challenges

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Abstract

The Customer Relationship Management (CRM) practice involves reengineering of various customer-related processes. The objective of this study is to understand how CRM system enables the business to transform its processes especially the selling chain into the customer-centric ones. This study identifies opportunities and barriers to the selling chain reengineering in the Korean Insurance Industry. The Korean insurance company has a unique structure composed of traveling sales people. Much of the sales are done through visiting potential customers based on personal relationships. The Korean insurance industry is facing deregulation in 2004. The uniqueness in organizational characteristics and sale culture as well as industry future presents unique challenges and opportunities of the selling chain reengineering. This study uses multiple case studies.

1. Introduction

In the digital economy, selling is not as simple as it used to be, due to the rapid proliferation of channels [8]. Selling channel ranges from telemarketing to web. Companies specialized in the on-line sales threaten the traditional companies. The products become more complex with shorter life cycle. Customers demand more efficient buying experiences as well as higher levels of service and customization.

The changes in the selling environment pressure the company to increase the productivity and responsiveness of their sales force. Enhancing customer relationship is rated first in importance by IT managers to gain competitive advantages [12]. Sales representative needs to keep up with changing products as well as customer preferences and trends.

A Korean insurance industry has an organizational structure composed of headquarters and regional sales offices. The sales office employs sales

people who visit potential customers to sell the insurance. Much of the sales are done through personal relationships of the sales people due to the characteristics of kinship-based sales culture. The backgrounds of the sales people range from college graduates to housewives.

Korean insurance industry has a low customer retention rate because of the fierce competition and the lack of after-sales customer care. The compensation system for the sales people is oriented around the new sales. Further, the industry expects the dramatic changes in their business environments due to the deregulation in 2004. Growing successful long-term relationships with the customer are vital to the companies. Until now, Korean insurance industry regulates the product types and prices. After 2004, the industry will face fierce competition on and off-lines in terms of product lines and prices. The industry has already experienced fast moving electronic economy that creates more complex products with shorter life cycles. The deregulation will further create much more complexity on the products. Customer will demand more service packaged with the sales of the products.

The Customer Relationship Management (CRM) System is IT solution to accelerate CRM adoption. According to the survey done by Korean Software Industry Association (KSIA), the size of Korean CRM system market was expected to be \$64 million during the first quarter of 2001 [3]. The growth of CRM system is a direct result of the fierce competition, diverse customer needs, and information-driven management that characterize today's business environment.

The objective of this study is to understand how CRM system enables the businesses to re-engineer their selling processes. This study also identifies the opportunities and barriers of the process re-engineering.

This study is done in the context of the insurance industry using multiple case studies.

2. Research context

CRM is defined as a business paradigm that ensures every customer interaction results in exceptional experience for customers. The effort is strategically applied, ensuring the maximum effort is aligned with the most valued customers [15]. The ultimate goal of CRM is to arrange the entire enterprise around the customers. Practicing CRM by front offices as well as back offices ensures that the enterprise understands customer needs. The goals of this customer-centric business paradigm are [8]:

- Use existing customer relationships to grow revenue.
- Provide customized products and services based on customer wants, needs, buying habits and life cycles.
- Provide consistent customer experiences and superior service and support across all the contact points a customer choose.
- Keep customer royal.

Businesses are adopting technological solutions to accelerate the CRM. The key to the technical solution is the development of customer oriented data warehouse and use of various data analysis tools. Customer data scattered in the firm's operating database are extracted and stored in the data warehouse. Before stored in the data warehouse, data are cleaned to eliminate the redundant data and conflicting data. Data warehouse also stores data from various customer contact points such as point-of-sales, direct sales, call center and web. The data in the data warehouse is comprehensive, ranging from transaction-based data, customer profiles data, behavioral data, to customer complaints and questions. The goal of the data collection is to obtain information necessary to develop and maintain relationships with customers. The integrated customer data in the data warehouse allows the firms to keep track of individual preferences and anticipate their future needs.

OLAP (On-line Analytical Processing) and data mining techniques are used to extract information from data warehouse. OLAP method allows queries or searches of known variables such as asking how much of product A sold in district 1 [10]. Data mining reaches into data warehouse and extracts the most valued customers using sophisticated statistical techniques.

In addition to data warehouse and analytic tools, Sales Force Automation (SFA) and e-CRM packages are provided as a part of solution. The SFA is designed to increase sales productivity and marketing responsiveness. Sales force are equipped with notebook computers, web browsers and sales contact management software. The package enables sales force to download product availability data, potential customer lists, and e-mail at the field. It also allows sales force to enter and

upload customer and sales data that can be analyzed by marketing managers in the office. E-CRM is used to sell the products and provide services through web as well as to collect the customer data.

Adopting technical solution does not guarantee the CRM practice by the enterprise. CRM practice represents changes in various customer-related process. For example, sales force equipped with PDA or notebook must utilize customer data before, during and after the customer consultation. SFA enables sales personnel to enter his or her suggestions on how to improve business activities and customer complaints on products or services. Based on this information, the sales group can hold meetings for improvements or solutions. Interaction with peers in a team environment often aids the conversation of tacit knowledge into explicit knowledge operationalized as radical process redesign.

Employees need to utilize the customer data. The management at the all levels needs to apply various analysis techniques to the customer data. The data needs to be used to integrate front office activities with back office activities such as sales and service with product development. The customer concerns and complaints obtained during the sales and service should be followed by the product modification or a new product development. The redesigned process leads to an agile company that responds to customer concerns and requirements faster over the product's entire life cycle.

Figure 1 shows functional units and their activities in the reengineered selling chain in relation to the use of CRM system. In this study, the selling chain is defined as the value chain that consists of a series of sales related activities such as development of the product, marketing of the product, and sales of the product. The marketing department uses the analytic tools to segmentize customer data and develop an appropriate campaign strategy for each segment. The sales department utilizes the analyzed customer data for promotion and sales of products. During the promotion and sales, the individual customer data is used for personalized sales and promotion. During the sales consultation, the customer data including complaints and suggestions are entered into the system. The customer data entered in the system are analyzed by marketing managers in the office as well as the functional unit in charge of the product development.

Using Venkatraman [17] framework, the differences between technical solution and business process re-engineering are shown in Table 1. The technical solution for CRM requires extensive system integration with existing database systems. While a technical committee is responsible for ensuring technical interconnectivity, cross-functional business teams address business process interdependence.

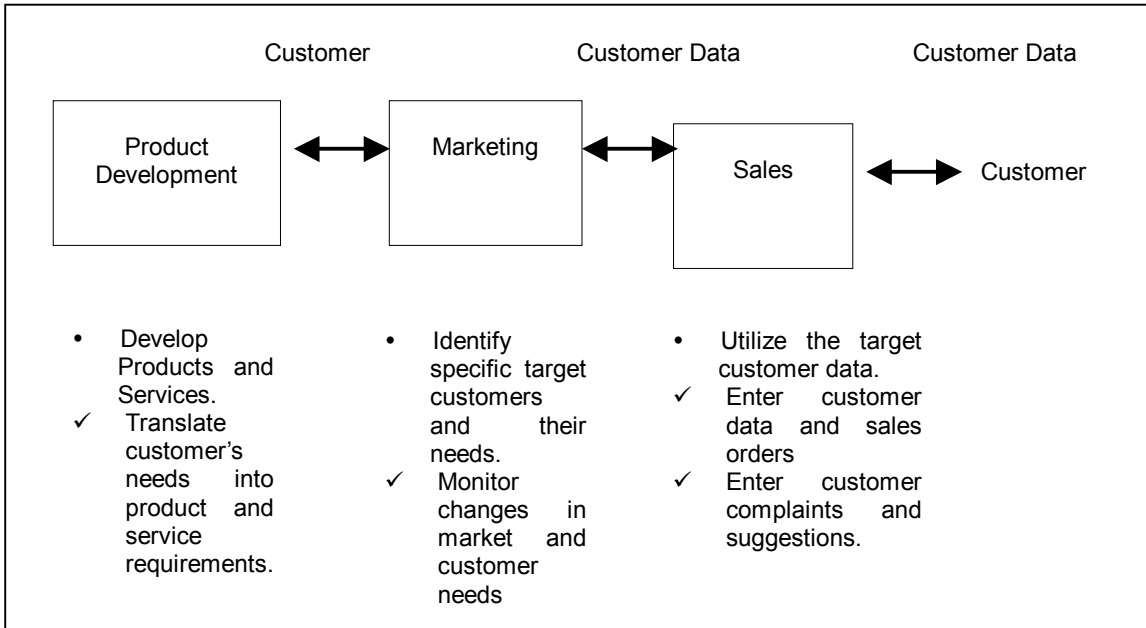


Figure 1. Reengineered Selling Chain

External technical vendors and system integrators can carry out the operating tasks for ensuring technical solution, but the responsibility for business process interdependence lies within the firm. Even if the firm achieves the objective of a seamless technical platform, development of customer-centric organization is ensured by streamlined interdependent business processes and a supporting performance assessment system

3. Research model and method

Process re-engineering community takes the position that firms derive economic outcomes of Information Technology (IT) through its impact on business processes [4, 6, 17]. The potential outcome of IT is further enhanced by redesigning business processes and by associated modifications to the organizational structure.

Distinctive Characteristics	System Integration	Business Process Redesign
Dominant Objective	Collect, store, analyze customer data	Business process Interdependencies
Primary Domain	Technical domain	Business domain
Responsibility	IT managers	Business managers
Management Focus	Operational; tangible	Strategic; intangible
Performance Assessment	Efficiency of technical standards	Effectiveness of business arrangements
Action Steps	Standardized	Firm-specific

Table1. Distinguishing Business Process Reengineering from Technical Solution (Adapted from [17])

The IT-enabled strategic change such as BPR hinges on its context such as strategic alignment and culture. The research model of this research is shown in Figure 2.

3.1 Strategic alignment

Alignment between business and IT objectives are important in order to take advantage of IT opportunities and capabilities. The strategy shortfall occurs when the business strategy fails to take full advantage of the IT capability. Business opportunities are present in the environment for which technology support is available, yet the business strategy has neglected to take full advantage of these opportunities.

As IT investment value is measured at the process level, strategic alignment must be measured at the process level as well [16]. The organizational capability is an expression of business strategy, defined as a firm's capacity to deploy resources, usually in combination, using organizational process to affect a desired end [1]. When IT capability and organizational capability don't match, the impact of IT on the business process will be lessened.

According to the previous research in the strategic alignment, the following proposition can be derived.

Proposition 1: The level of alignment between organizational capability and IT capability will positively influence the success of Selling Chain Reengineering (SCR).

The construct, *alignment between organizational capability and IT capability* is operationalized as capabilities of product development, marketing, sales force to use the system. Product development, marketing and sales are in the prerequisite interdependence where the output of one functional unit is used as an input to another [9]. For example, output of the marketing analyses is used as input to the sales unit.

Concurrent interdependence also exists since a feedback cycle occurs among three functional units. The success of SCR could be determined by the capabilities of the production and marketing personnel to use analytical tools for the analyses of customer data and the capability of the sales force to utilize the analyzed customer data from the marketing.

The sales force capability can be measured by the capability of the sales force to use the customer data from the system and enter the customer data into the system. In the field-sales cases, whether the sales person uses the mobile system represents his or her capability to use the system for the sales activities. Thus, the sales force capability is measured by assessing the percentage of the sales people who use the mobile system. The marketing capability is measured by the percentage of the marketing personnel who applies analytical tools to the customer data for analyses. The production capability is determined by whether the functional unit has data-based organizational procedure to translate customer needs into product requirements. The proposition 1 is further divided into the followings:

Proposition 1.1. The sales capability to use the mobile system will positively influence the success of Selling Chain Reengineering (SCR).

Proposition 1.2. The marketing capability to use the analytic tools will positively influence the success of Selling Chain Reengineering (SCR).

The ultimate benefit of the reengineered selling chain is to become an agile company that responds to customer concerns and requirements faster, better and more customized ways. Specific benefits are cycle-time reduction, responsive improvement, downsizing and service and product enhancement. The success of the SCR is measured by downsizing.

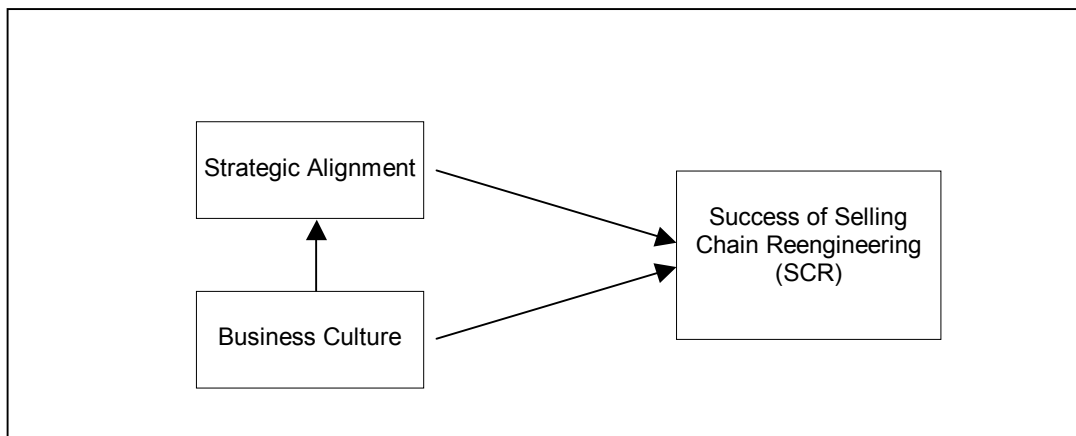


Figure 2. Research Model

3.2 Business culture

The success of SCR depends on culture in which the business operates [7,13]. Culture is defined as the collective programming of the mind, which differentiates the member of one group from another[7].

Contrast to the individualism, the collectivism refers to the extent to which needs and goals of the collectivity are more valued than individual needs and goals. While rational problem solving fit the high individualistic tendencies found in the U. S. [7], relationship-based problem solving fit the collectivism [13]. SCR associated with CRM system requires sales force to employ rational problem solving approach based on customer data. The relationship-based Korean business networks could influence the success of SCR.

SCR associated with CRM system requires obtaining customer data. For CRM, customer data is obtained during face-to-face sales consultation as well as through web and telemarketing. The success of SCR in relation with CRM system could also be affected by Korean culture in which customers are not comfortable with engaging in the electronic transactions through Internet and telemarketing. Thus the following proposition is derived:

Proposition 2: Social culture where the CRM solution is implemented will influence the success of the SCR.

Proposition 2.1. Interdependent business network will influence the success of SCR.

Proposition 2.2. Lack of trust in electronic transaction will influence the success of the SCR.

According to Lee [11], case analysis can be used to formulate the propositions to be tested. In this study, case analyses of two insurance firms are used to determine whether the proposition is worth to be tested. Data source include interviews with various levels of personnel as well as the secondary resources. The multiple case designs are appropriate to study emerging and complex phenomena [18].

4. Preliminary findings from insurance cases

4.1 KL insurance

KL has invested \$2.5 million on CRM solution and started the operation since August 2000. They have successfully integrated various customer contact points ranged from telephone call to Internet. According to the CIO, the outcome of CRM is rather uncertain. There are several factors associated with this outcome. One of the factors is the data quality. The company has offered the

sales people with the notebook computer with a low price; and introduced the compensation program based on the number of the customer data that they entered into the system. Sales people can access the customer data through the Web. However, due to the characteristics of the sales force, the majority of the sales people prefer to use the paper-based notebook. With these reasons, data warehouse is filled with the data obtained from the government based on primitive estimation on potential customers. Among 25 million customer data in the data warehouse, only 8million is the real customer. Therefore, the data mined from the erroneous source data are not trustworthy, which results in the salespeople abandoning the potential customer list from the system. Sales people would rather use individual instinct and connections based on the sales experiences. Some sales people believe that relationship-based sales work better than data-based sales regardless of the data quality.

KL has developed standardized OLAP modules for managerial employees to analyze the customer data. They also have Power-User who can retrieve the customer data freely. Sales force can access some of the analysis results through the web. Employees at all level are reluctant to use the available analyses tools, not comfortable with analytical problem solving approach. Employee education was performed before and during the CRM implementation.

Since most of Korean insurance companies imitate western insurance products, the sales and the marketing processes are not integrated with the product development process.

4.2 DF insurance

Since February 1999, DF has operated data warehouse and call center. The call center with the capacity of 150 personnel, responds customer requests and claims via either telephone call or Internet. The personnel also engage in telemarketing. DF has subsidiary IT company. Currently, about 5% of the sales force uses mobile system. Since 2000, sales people can access the customer data through their mobile system as well as the mining results in real time. To enhance the data quality, DF compensates the sales people who enter the customer data into the system. To obtain potential customer data, DF has strategic alliance with major bank and department stores in sharing customer data. According to the CIO, sales people who are not ready to use the system are becoming out of the competition. During March 2001, 60 branch offices that are 20% of the entire branches have been closed, which indicates the reduction of the sales people.

About 60% of the management is using OLAP tools. Company-wide OLAP education was followed by

assignments from executive office. Compared to KL, DF has relatively a small sales force and in managing personnel. Subsidiary IT company, alliance with other companies in data sharing, and assignment from executive offices indicate the recognition of IT importance by CEO and organization in general.

5. Preliminary results

Since most of Korean insurance companies imitate western insurance products, the product development is not integrated with the rest of the selling chain. Given the facts, the sales force and the management in DF is considered to be more IT-ready than KL. While the size of KL remains the same, DF downsized their sales force by 20%. This indicates the proposition on the strategic alignment holds true in these two cases.

Interdependent nature of Korean social networks could negatively affect success of the CRM. Since the product sales are done through informal networks, sales person values social networks more than the rational problem solving approach used by CRM system. This suggests that the proposition on the business culture needs to be tested.

A Korean insurance industry has an organizational structure composed of headquarters and regional sales offices. The sales office employs sales people who visit potential customers to sell the insurance. Much of the sales are done through personal relationships of the sales people due to the characteristics of kinship-based sales culture. The interdependent nature of Korean business networks works as a barrier to SCR. The relationship-based sales create the problem of not utilizing data from the system as well as not entering customer data into the system.

KL started e-CRM such as Cyber Customer Center and Cyber Panel as well as call center. Since customers are not comfortable with Internet commerce and telemarketing, the company has had difficulties in obtaining the customer data from the web. Customers prefer face-to-face contact, being reluctant to engage electronic payments. In contrast to the western countries, Koreans do not write personal checks, which could contribute to the mistrust in electronic payment. The difficulty of having the customer engaged in electronic transactions leads to the difficulty of obtaining the customer data from Internet and telemarketing. Since collection of the customer data is the prerequisite step for all other CRM activities, difficulty of getting customer data due to the lack of trust in electronic transactions is another barrier to SCR.

Another problem that was mentioned during the interview was the quality of the collected data. The

sales personnel who uses the mobile system tends to focus on the number of customer data instead of the quality of the customer data because of the current compensation system based on the number of customers. Thus, the efforts to improve data quality must accompany with compensation program by which operational employees are motivated to enter the accurate data.

The purpose of CRM practice is not only to identify potential customers but also maintain relationships with existing customers. During this study, it was identified that the sales people are more concerned with selling insurance than keeping customer relationships after sales or before sales. The reason is that their compensations are based on a number of new contracts. The development of compensation programs to care the existing customers and to enter accurate customer data will influence the success of CRM.

The barriers to selling chain reengineering are summarized below:

- Interdependent nature of Korean business networks.
- Lack of trust in electronic transactions.
- Poor data quality.
- Compensation System.

Based on these preliminary findings, the original research model in Figure 2 is revised as shown in Figure 3.

6. Current status of the research and presentation at HICSS

Preliminary findings provide the guidance for the survey design. Currently, the survey is being prepared. Using the survey, the revised research model will be tested. If the preliminary findings hold true after the survey, then the following propositions will be generated:

- ✓ The sales capability to use the mobile system positively influences the success of Selling Chain Reengineering (SCR).
- ✓ The marketing capability to use the analytic tools positively influences the success of Selling Chain Reengineering (SCR).
- ✓ Interdependent business network negatively influences the success of SCR.
- ✓ Interdependent business network negatively influences the success of SCR.
- ✓ Lack of trust in electronic transaction negatively influences the success of the SCR.
- ✓ Compensation system affects the sales capability to use the mobile system.
- ✓ The sales capability to use the mobile system positively influences data quality.
- ✓ Interdependent business network negatively

- influences data quality.
- ✓ Lack of trust in electronic transaction negatively influences data quality.

My expectation is that the collected data can be presented at the conference.

7. Expected contribution

This study shows important factors for the successful CRM:

- (1) User-friendly analysis tools.
- (2) Employee mindset.
- (3) Organizational readiness.
- (4) Compensation System

User-friendly tools need to be developed, which allows users at all levels to utilize the customer data. The development of the tools needs to be accompanied by the employee education programs. It is necessary to have the strategic level of enterprise wide IT education program, which overhauls the mindset of employees at both managerial and operational levels. Education of personnel as well as development of benchmarking cases enable organization to be ready for the CRM.

During this study, the compensation based on a number of new contracts is a barrier to the success of SCR. The development of compensation programs to care the existing customers and to enter accurate customer data will influence the success of CRM.

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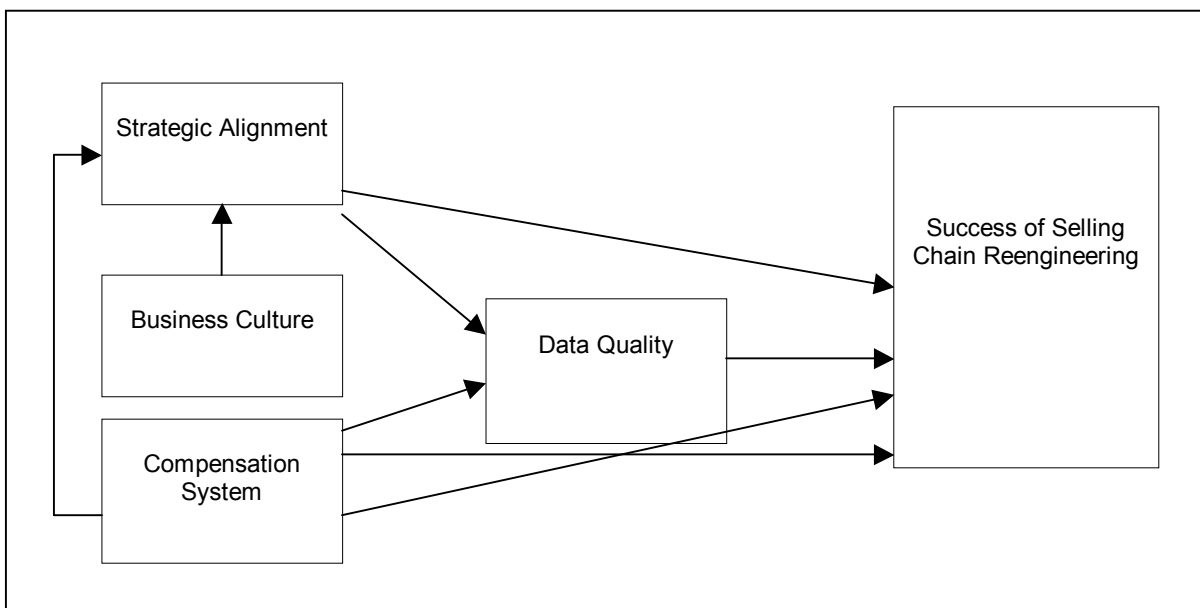


Figure 3. Revised Research Model

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