CHAPTER 3: RESEARCH METHODOLOGY

The objective of this study is to build a thorough understanding of the chained effects of CRM on organizational performance and the influential management activities. The research model with propositions are described in previous chapter and depicted in figure 2.1. The focus of this study is on proposition 1 to 4 , proposition 5 and 6 are not studied in this stage due to the resource limitation and the complicated and widespread issue of financial performance.

Two iterative steps of knowledge building are applied in building this CRM effect model: literature review and content analysis. The literature review and content analysis have been done iteratively for proposition verification and construct enhancement. The process is similar to content analysis (Bettman and Weitz 1983; Kotabe and Swan, 1995) where it is applied to "the technique for the objective, systematic, and quantitative description of the manifest content of communication" (Berelson, 1952) and to thoroughly analyze existing knowledge developed by both academics and practitioners.

Table 3-1. Research Process

Activities	Why	How	Results
Literature Review	To Find the relationship between CRM and market-orientation	Literature reading and consolidation	Proposition 1, 3, 4, 5, 6
Content Analysis	To explore the impact of CRM on value-generation processes	70 real cases review and consolidation	Proposition 1, 2 Research model
Field Interviews	To collect data verifying research model and propositions	5 financial holding companies interview	Interview results
Single Case Analysis	To understand the CRM operation and the company background	Analyze interview results and collect public data of companies	Case studies
Cross Case Analysis	To discover the commonalities and differences among cases	Analyze interview results and case studies	Preliminary findings Confirmed propositions
Finding Verification	To verify the preliminary findings with interviewees	Telephone interviewees and verify the preliminary findings	Verified findings
Expert Interviews	To get richer understanding of the linkage between industry knowledge and the findings	Interview to two industry experts	Enhanced understand of CRM use
Conclusion	To make conclusion	Analyze verified findings and industry knowledge	Findings and implications

Filed interview is applied in the next stage to validate the model developed and to get a richer understanding of the constructs. The distinctive point of the filed interview is to collect data from multiple informants from multiple cases to eliminate informant bias and to build a cohesive view of the behavioral changes in the organization. Furthermore, the interview results will be summarized and consolidated in a structural form. Single case analysis is applied in the next stage to understand the CRM operation and the company background. In the next stage, cross case analysis is applied to discover the differences and commonalities between cases. After case analysis, this study develops preliminary findings. In next stage, the preliminary findings are verified with interviewees. Expert interview is applied in the next stage to validate the linkage between industry knowledge and verified findings. Finally, this study makes a conclusion based on these verified results. The proposed CRM measurement instrument is drafted in the appendix A with open questions asked for further elaboration on user behaviors.

3.1 Literature Review

Academic literatures reviewed are in the areas of CRM impacts, marketing theories, behavior theories and the related IT impact on value chain processes. This step provides a base for forming a semi-structured plan for case analysis and the case analysis results are then synthesized with the literature review and form propositions about the market-orientation effects of CRM.

3.2 Content Analysis

To verify and enhance the understanding of the CRM impact on various processes in the organization, a thorough review was conducted on 70 reported cases by five major CRM vendors including Siebel, SAP, SalesLogix, FrontRange, and Salesforce. After case reviews, 37 cases were selected out of the 70 cases for further analysis (summarized in Table 3-2). The case selection criteria are 1) these cases have applied CRM systems for both operational and analytical functions (Gefen and Ridings, 2002), 2) these cases have reported CRM effects on both behaviors and performance, and 3) these cases try to address CRM effects on all value-generated processes. A code sheet was developed that covered the different items of behavioral changes and related process changes. Several comparison tables were created to develop case findings and the synthesized findings are presented in table 2-1.

Table 3-2. Cases Analyzed

User organizations	User systems	Cases selected	Case reviewed
Large sized and fortune 500	Seibel	18	8
	SAP	12	6
Medium sized	SalesLogix	12	8
	FrontRange	9	9
Small sized	Salesforce	19	5
Total cases		70	37

3.3 Field Interview

The main subjects of this study, market-orientation behavior and processes, are multi-dimensional and may be perceived differently in different organizations, which necessitates dynamic exploration into different situations. For that reason, the presence of the researcher during the data collection process is considered essential: to clarify concepts and to ensure that the understanding of the concepts involved is consistent and precise across the subjects. The research method should therefore be able to accommodate a perceptual approach and also build concepts from multiple sources.

Use of multiple case studies is the applied method for studying emerging phenomena in a real-world setting (Yin 1994). After initial discussions with a number of different CRM-using organizations, it was decided that the study would focus on five financial holding companies described in Table 3-3. Financial holding companies by their nature tend to have a wide rang of customers and products. Customer relationship is the key for business success in this competitive market. The use of CRM is highly related to market performance. The world's financial system in the early twenty-first century essentially deal with consolidations and mergers, and most financial institutions have moved towards holding companies to improve economies of scale. In Taiwan, the Merger Law of financial institutions and the Financial Holding Company Act were signed into law on November 2000 and June 2001. The Act permits banks, insurance companies, securities firms, and other financial institutions to affiliate under common ownership and offer their customers a completer range of financial services. At the moment, there are 14 financial holding companies in Taiwan whose stocks have been listed until 31 December 2004. There are some advantages of financial holding companies – such as a mitigation of a maturity mismatch, informational advantages, economies of scope, diversification benefits, operational efficiently, economic of scale – may be applicable to the banks that engage in those non-banking activities (Kuo and Lu, 2005). CRM techniques have been widely adopted by these companies to either provide necessary service or build differentiation in the market. Based on the information provided by Taiwan Financial Supervisory Commission, there are ten companies practicing retail banking business. In order to work on a well-spread sample cases this study selected five companies out of the ten financial holding companies for case study. These selected cases rank between the top and the bottom in the market by credit card volume which is one of the key indicators of market performance.

Table 3-3 description of cases studied

Company	CRM modules implemented	Year of CRM use	Performance ranking
A	Call center	3	10
B	Call center	5	8
C	Call center and data warehousing and data mining	5	5
D	Call center, data warehousing and data mining	5	3
E	Call center, data warehousing, data mining and some business intelligence tools	8	1

In this study, five financial holding companies were selected to be interviewed. The major interviewees are users and managers of CRM systems because they understand the operation and effects of the CRM. Other interviewees are the employees of CRM-related departments such as the department of information systems. This study selects two to five informants for each company. Every interviewee took more than an hour. The transcription of the interviews is drafted in appendix B.

Table 3-4 Profiles of Interviewees

	Department	Job Title	Seniority	Interview Time
A	Department of Service	Chief	16	2hrs
	Department of Service	Senior Associate	6	2hrs
	Department of Life Insurance/Planning & Marketing	Executive Officer	8	1hr 20ms
B	Marketing Department	Division Chief	2	1hr
	Credit Card Department/Planning & Marketing	Assistant Manager	8	1hr 10ms
	Credit Card Department/Customer Service	Manager	10	1hr 10ms
	Credit Card Department/ Customer Service	Senior Associate	6	1hr 10ms
	Credit Card Department/Information System	Assistant Manager	8	1hr 10ms
C	Credit Card Group/Marketing Department	Vice President	15	1hr
	Credit Card Group/Marketing Department	Assistant Manager	4	1hr 10ms
D	Retail Banking/Customer Relationship Development	Manager	3	2hrs
	Credit Card/Business Development	Manager	4	1hr 30ms
E	Information Services Group/Data Warehouse	Manager	10	1hr
	Credit Card Division/Segmentation & Strategy Mgt.	Manager	6	1hr 10ms
	Wealth Management Division/Affluent customer	Vice President	5	1hr 10ms

3.4 Single Case Analysis

To understand the CRM operation and the company background, this study analyzes interview results and collects public data of interviewed companies. Case studies are summarized and described in the next section. Each case will be deeply discussed and analyzed for understanding its properties and advantages.

3.5 Cross Case Analysis

To discover the commonalities and differences between cases, this study deeply analyzed and consolidated interview results and case studies. In this stage, this study formed preliminary findings and confirmed propositions.

3.6 Finding Verification

After forming preliminary findings, interviewees were called and asked whether the preliminary results are fit in with their points of view to verify the preliminary results. Suggestions provided by interviewees are also adopted in verified findings.

3.7 Expert Interviews

In order to get richer understanding of the linkage between industry knowledge and the findings, two industry experts are interviewed. One is the president of a professional call center outsourcing company who is a specialist in CRM implementation of banks and call center outsourcing. Another one is an official of Taiwan Financial Supervisory Commission. The experts analyzed the market condition and provided industry knowledge base on the preliminary verified findings.

3.8 Conclusion

Based on the verified findings and industry knowledge, this study provides some final findings and implications for managers to acquire advanced benefits from the CRM use.