

## CHAPTER 6: CONCLUSION

### 6.1 Conclusion

What are the technology and organizational elements of a CRM system?

Previous research has shown that the implementation of an enterprise-wide CRM system involves integration of not only the IT infrastructure components but also organizational resources. The lack of detailed knowledge of CRM technical and organizational integration makes it difficult for companies to take best advantage of their large CRM investments. To build a clear understanding of the management of the technology and organizational elements of CRM systems, this research strives to determine (1) the elements of the technology and organizational sides of a CRM system, and (2) how the technology and organizational elements interrelate to create effective CRM operation. The goal is to build in-depth knowledge of the dynamics of CRM systems and to suggest lasting organizational capabilities that are adaptive to environmental changes.

Based on the literature reviewed, the technology and organizational elements of a CRM system were described, and two propositions were formulated to explain how businesses integrates the technology and organizational elements to obtain lasting value from a complicated CRM system (Chapter 2). Then, based on the literature and verification with practitioners, a semi-structured questionnaire (in appendix D) was developed to test propositions and collect detailed information on the management of the technology and organizational elements of CRM systems. This research then used an in-depth case study methodology to study three mobile telecom companies in Taiwan to test its propositions. Through field interviews, single case analysis, and cross case analysis, the interview results of each case provide evidence verifying the propositions, as well as detailed information on the integration of the technology elements and the alignment of the organizational elements of a CRM system (Chapter 4). Finally, the research findings are consolidated in Chapter 5 to provide greater insight into how the technology and organizational elements of a CRM system should be integrated to build an effective CRM operation.

Regarding the first research question “*What are the technology and organizational elements of a CRM system?*” Based on the literature review, the technology elements of an enterprise-wide CRM system can be organized into three parts: communicational CRM, execution CRM, and intelligent CRM. Further, organizational resources such as structure, processes, culture, and capabilities are elements that need to be aligned and coordinated with CRM technologies.

To seek answer to the second research question “*How should the technology and organizational elements be aligned to develop effective CRM operation?*” Two propositions were formed to verify “the greater the integration among CRM technology elements, the greater the value generated from the infrastructure” and “the better the alignment between technical and organizational CRM elements, the greater the value generated from the infrastructure.”

The in-depth case study on the three mobile telecom companies has confirmed the two propositions. The three cases have all integrated the CRM technology elements to a proper degree, and the basic organizational alignment necessary for CRM has been achieved in the three companies. Furthermore, the three companies all obtain similar value generated from the CRM infrastructure - sustaining each company's market competitiveness.

In addition to confirming the propositions, the results of case study have also enhanced the findings of the propositions. Major findings include: (1) A complete integration among CRM technology elements may not be necessary, and the level of data integration should be selective. The complete integration of non-transactional customer interaction data from all front-end interaction channels may not be necessary, and only the data needed for analysis need be fed into the DW. In addition, because of privacy issues, employee accessibility to customer information should be carefully assigned. (2) Information integration does not necessarily rely on IT and sometimes cannot be achieved solely by IT. Organizational mechanisms including processes and other aligned resources may create better customer information circulation. (3) The three cases all take "human data" - the non-transactional customer information - seriously. It is important to build organizational mechanisms to acquire human data and learn from it. (4) In telecom industry, CRM IT has become a commodity. It is an inevitable investment and forms the fundamental infrastructure for maintaining market competitiveness. It is critical that companies should dynamically integrate and align their organizational resources according to the changing environment to establish differentiated capabilities of CRM and apply differentiated competitive strategies to create outstanding market performance.

The first finding clarifies the concept of the integration among CRM technology elements. The second and third findings once again emphasize the importance of organizational elements. The shortage of the technological CRM should be complemented by the use of organizational resources. Finally, the fourth finding highlights that in the saturated market of the telecom industry, companies have to strengthen their competitive capabilities by maintaining a fundamental and integrated CRM infrastructure, integrating and aligning the organizational resources, enhancing differentiated capabilities, and applying CRM through differentiated competitive strategies. These research findings provide the insights into how to integrate the technology and organizational elements to create an effective CRM operation. It is hoped that these insights can provide useful ideas to managers who want to effectively make use of CRM.

## **6.2 Academic and Managerial Implications**

This research provides insights into how the CRM IT (hard infrastructure) and organizational resources of CRM (soft infrastructure) should be dynamically integrated and aligned according to the changing environment to establish differentiated capabilities.

The CRM management model provides a useful reference for managing the technology and organizational elements of a CRM system. The propositions on CRM management can assist effective CRM use by providing understanding of the management of the technology and organizational elements, and by highlighting pivotal points in developing and retaining continuous value from a CRM system.

### **6.3 Research Limitations**

This research conducted multiple interviews and collected secondary data of the companies, to eliminate the possible missing points and bias about the management of CRM general findings have been verified with major interviewees of these companies and further validated by industry experts to assure the validity of the research.

Because of the full competition of mobile telecom industry in Taiwan, the research results represent the management of CRM systems in a mature market. The three selected cases may not represent situations of the management of CRM systems in general. However, findings presented here provide a preliminary base for extension and verification.

### **6.4 Future Research**

This research investigates CRM use of the three mobile telecom companies and analyzes their market performance in past three years. However, in mobile telecom industry, many important issues have happened recently and the influence of those issues is not evident at present. The important issues include the complete merger to small-scale mobile telecom companies in 2004, the launch of MNP (mobile number portability) services by DGT in October 2005, and 3G services which have been launched by every mobile telecom companies after 2005. How the mobile telecom companies utilize their integrated resources to confront the competitive issues has become a critical point on industry observers' agenda. Future researches could further trace the market performance and CRM use of mobile telecom companies after 2006 to investigate how the companies utilize the hard and soft CRM infrastructure to generate outstanding market performance under the dynamic competitive environment.

Besides, the research results mainly reflect the management of CRM systems in mobile telecom industry. Future researches could investigate the research subject in other industries to build a complete understanding of the CRM management under different industry environment.