

Full Length Research Paper

Customer relationship management and customer satisfaction

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The understanding of how to manage customer relationship effectively has become an important topic for both academics and practitioners in recent years. However, the existing academic literature on customer relationship management (CRM) strategies of banks does not provide a comprehensive outline of what specifically constitutes CRM phases. This study has three purposes: (1) to conceptualize and operationalize the CRM implementation in commercial banks in Taiwan; (2) to determine whether the CRM implementation is positively associated with customer satisfaction; and (3) to determine key moderators between CRM implementation and customer satisfaction. Findings revealed that CRM implementation is associated with customer satisfaction; and there are significant interactions amongst Information technology (IT) capability, contact rate management and recovery management with customer satisfaction. A regression model was churned to evaluate the criteria to measure the level of CRM implementation on customer satisfaction.

Key words: Customer relationship management (CRM), commercial banks, customer satisfaction, organizational characteristics, Eigen value.

INTRODUCTION

In recent years, many banks intend to develop and manage stronger interaction with their customers with the aim to maximize customer equity. This involves building and managing successful customer relationships to raise customer satisfaction. After 1990s, the number of banking consolidation and cross-sector business increased rapidly.

Taiwan's financial industry, which now accounts for 12% of total gross domestic product (GDP), has changed greatly in the past few decades and become a flagship amongst the service industries. Due to the dramatic changes in the global business environment and the shift of power from businesses to customers, the paradigm of business-to-customer has been replaced by that of Customer relationship management (CRM).

Inevitably, many banks have begun to rethink on how to build valuable relationships with their customers. The expected contribution of this article is to conceptualize and operationalize a measure to which CRM is implemented in commercial banks in Taiwan.

THEORETICAL FOUNDATION OF THE CRM IMPLEMENTATION

The literature on CRM suggests that banks should consider the customer relationship life cycle (Dwyer et al., 1987). In general, there are three core phases: customer acquisition, customer enhancement, and customer recovery. CRM implementation is a long term longitudinal phenomena. Thus, in this study, the three core stages are characterized in greater details in terms of the associated attributes of commercial banks in Taiwan.

First, the acquisition phase describes the initiation of a customer-bank relationship. A bank faces the following marketing tasks: customer persuasion and customer stimulation. Quality guarantees are supposed to convince the potential customer (Moorthy and Srinivasan, 1995). In addition, recommendation by other customers, such as using word-of mouth (WOM) communication achieves the same effect (Haywood, 1989). Villanueva et al. (2008) maintain that customers who are acquired via WOM add

more long-term value to the firm than customers via traditional marketing channels.

The next stage is the customer enhancement phase. This phase includes three major CRM tasks: contact rate management, regular evaluation management, and increasing selling management. In CRM initiatives, customer representatives' help customers get used to the products and services, thereby increase customer familiarity.

The representatives also collect customer information. As the service industry has a high degree of integration and interaction in terms of contact contribution, empowerment is a helpful instrument for successful control of individual customer relationships (Mudie and Cottam, 1993). Therefore many banking service systems, such as Automated teller machine (ATM), Internet banking, and call center play the role of touchpoints.

One of the characteristics of successful CRM implementation is the capability of the business to develop better or more suitable products and services via these "touchpoints" (Davenport et al., 2001). The most obvious evidence of these "touchpoints" is the use of Internet which decreases the communication cost with customers (Sharma et al., 2000).

Deploying Information technology (IT) support functions fosters one-to-one relationships with each individual customer at any time (Shoemaker, 2001). Profitability of individual customers may change over time. In the CRM paradigm, one of the key goals is to determine different resource allocations for different tiers of customer. The customer's tier membership depends on the economic value of that customer or segment of the business (Zeithaml et al., 2001).

A common finding is that businesses overspend on marginal customers and the most profitable customers do not receive their fair share of attention (Reinartz et al., 2004). Businesses systematically attempt to mature relationships by cross-selling products with high purchase likelihood (Kamakura et al., 2002).

Third, the termination of a customer relationship usually happens when the customer feels that the value of the service declines. Smith and Bolton (1998) maintain that customers demand and expect service recovery if failures took place. Service recovery is critical as it provides an opportunity to retain customers.

If the customer has been lost but is still attractive, recovery offers could be made to the customer (e.g. cancellation in the initiation fee; taking care of formality caused by the switching) or value added services could be offered.

In the customer-centered paradigm, customer asset management (CAM), customer equity (CE), return on quality and service profit chain are similar to CRM (Berger et al., 2002; Blattberg et al., 2001; Rust et al., 1995; Heskett et al., 1994).

These management concepts are based on customer-centered viewpoints. One of the similarities shared by the previous concepts is customer knowledge as the key

factor. The ability to obtain customer knowledge is a competitive advantage in the contemporary paradigm (Hogan et al., 2002).

HYPOTHESIS DEVELOPMENT

Many studies have proposed that CRM technology and organizational alignment moderate the results of CRM activities and business performance. Deploying IT helps foster one-to-one relationships with each individual customer (Shoemaker, 2001).

Furthermore, technology facilitates customized offerings at declining prices (Peppers and Rogers, 1997). Therefore consistent service experience is easily delivered to customers through IT tools (Piccoli and Ives, 2005). Contingency theory hypothesizes that business profits will be greater if fitted business structures are developed as well (Miller, 1996). Thus a fitted alignment of organizational structure fosters business performance. Kotler and Armstrong (2002) maintains that a clear organizational mission is the same as an "invisible hand", which states the aim of a firm, and directs the behavior of its employees. Kohli and Jaworski (1990) also maintain that a clear customer-oriented mission can help guide employees' behavior. Therefore, the moderating effect seems clear.

In this study, organizational characteristics refer to IT capability, IT investment, and customer-oriented alignment. Consequently, the following depicts the hypotheses constructed for this paper.

H₁: The greater the degree of CRM implementation, the better the customer satisfaction.

H_{2a}: IT capability has a positive moderating effect on the CRM implementation customer satisfaction link.

H_{2b}: IT investment has a positive moderating effect on the CRM implementation customer satisfaction link.

H_{2c}: Customer-oriented alignment has a positive moderating effect on the CRM implementation customer satisfaction link.

METHODOLOGY

This study is based on the causal research design which included both secondary and primary information sources. Primary data was collected from 31 general managers of 42 commercial banks of Taiwan via a questionnaire. The questionnaire incorporated 7 nominal-scaled and 40 five-point interval-scaled questions.

The questionnaires were sent to the 42 respondents by both email and registered post. The respondents were selected according to the data presented in the 2009 Financial Statistics Abstract of Taiwan. Once the sampling plan and size were determined, pre-mailing telephone calls were made to the 42 general managers' offices. A follow-up telephone call was made after the initial sending out of questionnaires. After the receipt of 20 mail responses and 11 digital responses, screening was carried out.

Gay (1992) proposed that the respondents should exceed 30

when conducting correlation studies. Altogether, 31 complete responses were collected representing a 73.8% response rate which was considered satisfactory.

RESULTS

Factor analysis was carried out on the 21 items of the construct, that is, CRM. The composite reliability of the construct, CRM Implementation, is 0.941. Another factor analysis was carried out on 9 items of the construct, that is, organizational characteristics. The composite reliability of the construct, organizational characteristics, is 0.831. Then the final factor analysis was carried out on 10 items of the construct, that is, customer satisfaction. The composite reliability of the construct, customer satisfaction, is 0.846. To sum up, the reliability of each construct is acceptable.

When conducting regression analysis, variables are grouped into main effects, standardized coefficients (β s), and interaction effects (γ s). All estimations fit the data well where the R^2 is 0.420 for cross-selling and 0.809 for willing-to-pay.

This study hypothesized that the degree of CRM implementation is positively associated with customer satisfaction (H_1). There are five factors extracted from the CRM dimension. Meanwhile two factors extracted from customer satisfaction that is, cross-selling and willing-to-pay, are dependent variables. Support is the strongest for increasing selling management ($\beta = 0.658$, $p = 0.000$), acquisition management ($\beta = 0.375$, accumulative $p = 0.000$), and regular evaluation management ($\beta = 0.375$, accumulative $p = 0.000$) in willing-to-pay.

The association between recoveries management and willing-to-pay is negative but marginal ($\beta = -0.309$, accumulative $p = 0.000$). Support is the strongest for contact rate management ($\beta = 0.532$, $p = 0.002$) but marginal for recovery management ($\beta = 0.370$, accumulative $p = 0.000$) in cross-selling. Thus, the more banks engage in CRM implementation, the better the customer satisfaction is. To sum up, H_1 is accepted.

The next study hypothesized that IT capability has a positive moderating effect on the CRM implementation customer satisfaction link (H_{2a}). For cross-selling, IT capability is marginally supporting contact rate management ($\gamma = 0.412$, $p < 0.05$) and recovery management ($\gamma = 0.365$, $p < 0.05$). This means that the interaction between contact rate management and IT capability ($\gamma = 0.412$, $p < 0.05$) is positively associated with cross-selling.

Additionally, the interaction between recovery management and IT capability ($\gamma = 0.365$, $p < 0.05$) is also positively associated with cross-selling. Finally for willing-to-pay, the moderating effect of IT capability was not significant in any CRM sub-constructs. To sum up, H_{2a} is accepted.

In testing H_{2b} , IT investment has a positive moderating effect on the CRM implementation customer satisfaction

link. Notably, this finding was somewhat contrary to the literature. The interactions between IT investment and each CRM implementation activity were not significant. Thus, H_{2b} was not significant for any sub-constructs of customer satisfaction. To sum up, H_{2b} is not supported.

The final study hypothesized that customer-oriented alignment has a positive moderating effect on the CRM implementation customer satisfaction link (H_{2c}). Similar to H_{2b} , the finding was contrary to the literature. The interactions between customer-oriented alignment and each CRM implementation activity were not significant. Thus, H_{2c} was not significant for any sub-constructs of customer satisfaction. Consequently, H_{2c} is not supported.

FINDINGS

The results of this empirical study produced the following notable findings. First, it presented the most relevant and fundamental theoretical approaches that form the basis of conceptualizing CRM in the investigated industry that is, banking (Table 1 for instruments of CRM implementation). In essence, the study contributes to the existing knowledge in CRM.

Second, the implementation of CRM is positively associated with customer satisfaction. Third, there is a significant interaction between IT capability and both contact rate management and recovery management in the context of improving customer satisfaction. Fourth, the moderating effect of IT investment is not significant. Lastly, the moderating effect of customized-oriented alignment is not significant.

DISCUSSION

This study provides a systematic outline of CRM initiatives that take place at each phase. Thus, this model can be adapted to identify the key success factors in CRM, and can be an evaluation criterion to measure the level of CRM implementation. The findings indicate that the implementation of CRM is positively associated with customer satisfaction. The strongest positive effect is via acquisition management, regular evaluation management, and increasing selling management, followed by contact rate management and recovery management.

In the case of recovery management, two possible explanations exist in this result. Customer recovery management was underestimated by banks so they did not implement it effectively. In addition, banks may be subject to type II error which means that they are probably reluctant to revive a relationship of lost customers, who they defined perhaps carelessly, as unprofitable. There is a significant interaction between IT capability and both contact rate management and recovery management in the context of cross-selling.

Table 1. Overview of phase-driven CRM instruments.

Phases	Tasks	Instruments
Acquisition	Customer persuasion	*Quality guarantee
		*Recommendation
	Customer persuasion	*Short-term stimulation
		*Long-term stimulation
	Contact rate	*Frequency of contact
*Perceived exchange quality		
*Empowerment		
Regular evaluation	*Multiple contact channels	
Enhancement	Increasing selling	* Regular evaluation on profitability
		*Cross selling
		*Up selling
		*Customized offering
		*Setting up switching barriers
Recovery	Recovery	*Lower service cost
		*Error rectification in 4P and service
		*Recovery offers in 4P and service
		*Added value in 4P and customized service

Thus, implementation of CRM is more likely to raise customer satisfaction as banks develop technology systems that can support CRM activities.

Another notable finding in the results shows that technology investments do not perform up to expectations. As a result, the moderating effects of IT investment were not significant. This finding implies that there are difficulties in making an IT investment pay off. However, it also can be argued that technology investment offers positive benefits only if initial implementation difficulties are overcome.

CRM information technology investment is relatively recent, so the benefits generated from it are still not obvious. This result shows that successful implementation of CRM is not synonymous to technology development. Thus, if banks only concentrate on technological aspects when implementing CRM, the companies are more likely to be disappointed. For example, as banks started to use technology to shift from personal customer interaction to Internet or call-center-based interactions, many customers experienced a drop in the quality of the communication process. This is a waste of resources.

The last finding suggests that the moderating effect of customized-oriented alignment is not significant. This result echoes the previous finding implying that empowerment can be an additional helpful instrument in

CRM for successful control of individual relationships. The most important role in contacting specific customers and making the regular evaluation and segmentation is that of the customer representatives. Thus one can expect empowerment is more critical than teamwork. Another possible explanation is that the customer base within the bank becomes unstable if customer-centric alignment is emphasized. This is why more initiatives are adopted to satisfy the customer base.

One of the most important goals of CRM implementation is to obtain and maintain a stable customer base, which leads to efficient allocation of resources. As the bank lacks a stable customer base, one can expect it to practice forced alignment. This result seems to reflect that an unstable customer base exists.

MANAGERIAL IMPLICATIONS

The findings of this study show the following implications in commercial banks in Taiwan. First, this study provides a comprehensive as well as a systematic outline of the CRM initiatives that take place at each phase. Second, the result indicates that CRM-customer satisfaction link is strong as suggested in the literature. The findings also indicate that recovery management in profitable lost customers was underestimated implying that banks do

not implement recovery activities effectively. Third, the result indicates that the moderator effects are not as strong as expected.

CRM implementation is likely to raise customer satisfaction as banks develop technology systems to support communication. Customer representatives play the most important role in communicating with customers. Thus this result echoes the conclusion that empowerment rather than teamwork is recommended for customer-oriented design.

There were some limitations in this research. Although ample research was carried out, the concept of CRM continues to evolve constantly. Consequently, longitudinal research could be carried out to enrich the present proposed model. For instance, the negative effect or return of IT investment at present may possibly revert to a positive effect over time. This means pay off from IT investment may be realized in the long run. In any surveys carried out, common method variance may exist to some extent. Thus, the bias of the correlation among variables may probably be present. Nevertheless internal consistencies were conducted to overcome this problem.

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