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Customer Relationship Management: Is It Still Relevant to Commercial Banks in Taiwan?

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Abstract

Nowadays, customers are regarded as a commodity. Customer Relationship Management (CRM) in a bank entails important phases such as integrating the communication tools to meet the needs of customers, treating each customer as individuals, and making the customer relationship an imposing and perpetual experience. The aim of this research is to determine the effectiveness of CRM implementation on customer satisfaction and perceived business performance. Literature suggests that successful CRM efforts involve proper deployment of the three phases in CRM implementation, i.e. acquisition, enhancement and recovery phases. Furthermore, there is a strong causal relationship between CRM implementation and customer satisfaction as well as perceived business performance. A survey was carried out using a survey instrument on commercial banks in Taiwan. Findings revealed that CRM implementation is positively associated with customer satisfaction and perceived business performance as suggested by the literature. Contact rate and recovery management were found to be associated with customer retention while acquisition management, regular contact and evaluation of customers lead to improved loyalty and employee sentiments. In a managerial point of view, this study provides an outline of the impact of CRM efforts on the dimensions of customer satisfaction and perceived business performance.

Keywords: CRM, Commercial bank, Customer satisfaction, Perceived business performance

1. Introduction

Customer Relationship Management (CRM) has been a popular management technique to maximize customer equity. This technique is particularly useful to commercial banks. CRM involves the construction and management of successful relationships with profitable customers. CRM initiatives often lead to improved customer satisfaction and business performance as customer potentials like profits are maximized. In essence, this paper examines the effectiveness of CRM efforts in the commercial banks of Taiwan.

For many years, marketing has been an important part of building a customer centric organization (Mithas, Krishnan, & Fornell, 2005). Unsurprisingly companies are customer driven and customers are a focal point for any marketing initiatives (Kumar & Reinartz, 2006, p. 3). Therefore delivering customer satisfaction is of primary importance. Satisfeid customers are known to be more loyal and hence provide a stable form of economic performance to the company. A stable customer base also indicates a company's ability to fulfill customers' needs and wants (Tuli & Bharadwaj, 2009). Customers who are acquired via word-of-mouth (WOM) are more likely to be loyal than customers via traditional marketing media (Villanueva, Yoo, & Hanssens, 2008). Evidently the investment in customer satisfaction can enhance a firm against stock market downturns (Zhang, 2005) and raise shareholder value (Anderson, Fornell, & Mazvancheryl, 2004). Therefore, customer satisfaction is regarded as a measure of loyalty and the retention of the existing customer base (Fornell, 2007). This intangible measure, i.e. customer satisfaction, can significantly affect the economic performance of firms (Bolton,

Lemon & Verhoef, 2007).

Kotler (2002) asserts that firms should formulate a set of strategies to ensure that their products and services are more superior to their competitors. In CRM, banks can create a competitive advantage by synergizing their efforts to delivery customer satisfaction while maximizing the profits. In this paper, the authors attempt to examine the effectiveness of CRM implementation on customer satisfaction and business performance. Therefore, the aim of this research is examine impact of CRM implementation on customer satisfaction and perceived business performance in commercial banks in Taiwan.

2. Theoretical Foundation of CRM Implementation

Before building a conceptual framework, it is important to highlight the different levels in CRM. CRM can be categorically grouped into three levels, i.e. functional level, customer-facing level and strategic level (Kumar & Reinartz, 2006). On a conceptual point of view, it is of essence that CRM is operationalized at the customer-facing level but the primary question is how operationalization is carried out. The customer relationship lifecycle comprises phases of customer relationship over time, and enables banks to plan their marketing strategy according to the relationship's intensity (Dwyer, Schurr, & Oh., 1987). In general, there are three core phases, i.e. Customer Acquisition, Customer Enhancement, and Customer Recovery (Dwyer *et al.*, 1987). As CRM evolves with distinct phases, the interaction and relationships between the bank and customers should be managed accordingly at each phase (Reinartz, Krafft, & Hoyer, 2004). The literature will attempt to rigorously study the pertinent stages of CRM in the context of commercial banks of Taiwan. This study defines the CRM at the customer-facing level as a systematic process to manage customer relationship at acquisition, enhancement, and recovery phases, to maximize the value of the relationship portfolio (Yao & Khong, 2008).

In the acquisition phase, the customer obtains preliminary experience with the bank's products and services, which enables the bank to collect data from the customer for a subsequent preparation of offerings. At this point, customers' perceptions of the products and services will take shape. Therefore good companies should use the data collected to enhance customers' experience thus generating positive perceptions (Davenport, Harris, & Kohli, 2001). Evidence shows that the expenses of customer acquisition and retention influence firm value positively and significantly (Gupta, Lehmann, & Stuart, 2004). In the customer acquisition stage, a bank seeks to establish contact to win over the customer. So it faces the following marketing tasks, i.e. customer persuasion and customer stimulation. Quality of services offered and service level guarantees are tools of customer persuasion (Moorthy & Srinivasan, 1995). Furthermore, other media channels such as WOM communication achieves the same effect if not better (Haywood, 1989). WOM marketing is effective because the interactions between the sender and receiver have high shared frame of reference (Misner, 1999). Villanueva et al. (2008) maintain that loyalties of customers who are acquired via WOM are more sustainable. Consequently many researchers have pointed out that firms should have more WOM communication initiatives (Liu, 2006). Therefore, the two instruments of customer persuasion are quality guarantee and WOM recommendation. Besides the above-mentioned, stimulation strategies can also provide customers incentives to enter into a relationship with the banks. Short-term stimulation strategies attempt to create a one-off transaction, such as special rates on credit card transactions or balance transfers while long-term stimulation strategies aim for multiple transactions and development of a more sustainable customer relationship. This may include packaged deals like home loans, credit facilities and fixed deposits. Consequently the two instruments of customer stimulation are short-term stimulation and long-term stimulation.

Once customer relationships are established, customer enhancement phase kicks in. Evidence show that if a company loses a customer, it has to spend approximately five-time the costs to attract a new one (Kotler, 2002). Therefore customer retention is ever more important. If customer based is sustainable due to loyalty and good retention programs, firms will benefit from higher profitability (Bolton & Lemon, 1998). One finding from Reichheld and Sasser (1990) indicates that a significant growth in relationship quality takes place during the mid-term of the relationship. This phase includes three major CRM tasks, i.e. contact rate management, regular evaluation management, and increasing selling management. Bank representatives can help customers to get used to a bank's products and services, thereby speeding up building up familiarity. Morschett (2006) argues that post-sale service is a basis for competitive differentiation. Simultaneously these customer representatives can gather customer information through customer contact. Furthermore, Ratchford (2001) and Gilbert and Veloutsou (2006) maintain that traditional perspectives in behavioral studies assume that customers know precisely what they want but in actuality they may not. Consequently bank customer representatives' efforts can be an impetus to drive customers' actions.

Quality is the result of interaction between the bank representatives and customers. If the interaction works well,

customer perceived quality will increase. Morales (2005) proposed that relationships which generate positive feelings and attitudes can lead to cognition and affective based exchange behaviours thus resulting in enhanced business performance. Service industries like banking industry have rigorous customer integrations and interactions. Therefore, empowerment of customer representatives provides better control and accountability of individual customer relationships (Zeithaml, Parasuraman, & Berry, 1990). When customer representatives are empowered, they are more motivated and committed. One of the characteristics of successful CRM implementation is that business is able to develop better or more suitable products and services by tracking customer tastes and evolving needs through each "touchpoint" (Davenport et al., 2001). The ability to gather and manage customer information is a key factor in sustainable competitive advantage (Hogan, Lemon, & Rust, 2002). The Internet has also become a popular tool for communication. The most obvious evidence is that the Internet decreases the cost of communication with customers (Sharma, Levy, & Kumar, 2000). Deploying IT infrastructure such as internet encourages one-to-one relationships with customers as services are available at any given moment (Shoemaker, 2001). Banks have gradually moved their relationship from fact-to-face to a faceless relationship via ATM, call-centres, Internet banking, tele-banking, etc. As face-to-face contact is minimal, the four instruments of contact rate management in banks are frequency of personal contact, perceived exchange quality, empowerment and multiple contact channels.

In a customer lifecycle, profitability varies through the passage of time. The economic value of customers depends largely on the types of market segments targeted (Zeithaml, Rust, & Lemon, 2001). Furthermore, the customers are unique individuals and benefits of their relationships with the banks are heterogeneous (Niraj, Gupta, & Narasimhan, 2001). Consequently banks need to allocate their resources efficiently to maximise the profitability of customer relationships. In short the customer relationship profitability distribution must be worthwhile and sizeable. A common finding suggests that businesses tend to overspend on customers that generate marginal profitability while the more profitable customers are not given ample attention (Reinartz *et al.*, 2004). Therefore, regular assessment and evaluation of profitable market segments are essentially vital in successful CRM implementation.

It is always important to cross-sell products on existing customer base as the likelihood of purchase is higher (Kamakura, Mittal, de Rosa, & Mazzon, 2002). Consequently, efforts in maturing the customer relationships and maximising customer potential are valuable. The growth phase for a firm is characterized by full utilization of customer potential, so banks should broaden the customer relationship by increasing selling. Active cross-selling efforts in banking need a high degree of customization, and specific marketing initiatives must be taken to stimulate customer subscription to the products and services. In the mature phase, due to the saturation of customer potential, the primary goal is to maintain the sales level; for examples, providing up-selling and customized offerings. Hence, it is necessary to turn a standard product or service into a customized offering and make it available to the customers. In the maturity stage of a customer lifecycle, it is sometimes difficult to further strengthen the relationship. So, banks can bolster the switching barriers by increasing the switching cost of customers. For example, long term loans can have lock-in contracts via penalty fees on early settlements. This prohibits customers from switching to other bank loans. Another approach is to lower customer service costs making switching cost comparably higher. For example, banks try to convince less profitable customers to do business with another bank, whilst retaining the more profitable ones by placing them in direct contact with customer representatives. Therefore, the five instruments of selling management are: cross-selling, up-selling, customized offerings, switching barriers, and lower service costs.

Naturally, the CRM process is subject to termination at any stage through causes related to the customers, competitors or internal managerial problems like service errors. The termination of a customer relationship takes place usually when the customer feels that there have been faults in the bank's offerings or service levels. In these circumstances it is essential that corrective measures are made to maintain the relationships. Not surprisingly, customer also expects service recovery when service faults take place. Consequently service recovery is critical in customer retention and relationship sustainability (Smith & Bolton, 1998). Error rectification can be accomplished through measures of marketing mix as well as supporting personally related actions. The termination of a customer relationship may lead to a possible switch to another bank. Hence, the bank should take pro-active efforts to re-acquire the customer. If the banks lose a profitable customer, recovery offers could be made (e.g. cancellation in the initiation fee; taking care of formality caused by the switching). Therefore, three instruments of recovery management are studied: error rectification, service-recovery offers and added values via the marketing mix in 4P and customized services.

There is evidence that suggests that perceived measures are a strong indicator for objective measures in business performance (Bontis, Chua, & Richardson, 2000). A study from an Asian perspective maintains that

benchmarking and employees sentiments are important indicators of perceived business performance (Khong, 2003). The author further states that the above mentioned indicators have a positive impact on perceived business performance. Guest (1997) supported that if the quantitative indicators of performance measures cannot be accessed, employee behaviour can be an indicator to measure business performance.

3. A Model of the Outcomes of CRM Implementation

As mentioned earlier, discussing the implementation of CRM is an initial part of this study. Primarily, the paper aims to this research is to determine the effectiveness of CRM implementation on customer satisfaction and perceived business performance. This can be achieved by conceptualizing the three main phases of CRM implementation and associating these phases with the dependence on customer satisfaction and perceived business performance. Figure 1 depicts an overview of the conceptual model. In short, the paper examines the effects of CRM implementation on customer satisfaction (H_1) and perceived business performance (H_2).

Insert Figure 1 here

4. Hypothesis Development

4.1 Effects on Customer Satisfaction

In the context of CRM, satisfaction is a cumulative affective and cognitive measure of purchases and consumption experiences (Anderson *et al.* 2004). To long-term customers overall satisfaction is more important than satisfaction at a specific point of time (Bolton, 1998). The gist of CRM is to provide individual customers with customized products and services through effective relationship management. In such circumstances, customized offerings of banks are very likely to fulfil customers' actual needs thus raising the perceived quality of the services and subsequently satisfaction levels. Morales (2005) also proposed that relationship marketing initiatives generate gratitude-based exchange behaviours thus resulting in improved firm performance. Bolton (1998) noted that profitability of firms is dependent on stronger relationships with customers Therefore customer satisfaction is seen as an indicator of business profit and business performance (Kaplan & Norton, 1996). In summary, CRM seems to contribute to customer satisfaction and can be hypothesized as follows:

H1: CRM implementation is positively associated with customer satisfaction

4.2 Effects on Perceived Business Performance

Benchmarking in a given industry means that a firm has the most efficient and effective operational procedures and the best range of offerings of products and services. The ability to gain and manage customer information is a key factor to sustaining competitive advantage (Hogan *et al.*, 2002). Zeithmal *et al.* (2001) assert that a rigorous CRM implementation implies an active involvement in the individual customer lifecycle. Therefore the allocation of resources in each relationship must be optimized. In CRM, Mulhern (1999) found that the alignment of resource allocation is pegged to customer profitability and growth. Therefore firms can serve individual customers better and delivery satisfaction better than their competitors. CRM emphasizes in building long-term customer relationships through related marketing networks which includes customers, employees, suppliers, contributors, retailers, agent, and other stakeholders. Since employee is a part of the marketing network, employees' sentiments are important. Such sentiments correlate with elements of satisfaction, i.e. employees' satisfaction. Kotler (2002, p. 13) maintains that good organizational performance is a result of an effective and efficient relationship between the customer and the employees. Thus, positive employee sentiments are expected as CRM is implemented. In summary, CRM contributes to business performance and can be hypothesized as follows:

H2: CRM implementation is positively associated with the perceived business performance

5. Methodology

This study involves an empirical study to estimate the causal relationships of a conceptual model (see figure 1). As a result a survey was conducted using a questionnaire that incorporated 7 nominal-scaled and 50 interval-scaled questions from a scale of one to five. The 7 nominal-scaled questions were to gather relevant information about the respondents while the 50 interval-scaled questions were about CRM implementation, customer satisfaction and perceived business performance. A pilot test was conducted on 4 senior managers of commercial banks and 3 academics in Taiwan. The amended questionnaires were later distributed to the respondents (who were general managers of commercial banks in Taiwan) by emails and registered posts.

In this study, the commercial banks are elements in the sampling frame. In each element, the headquarters of these elements are the sampling units. There are a total of 42 commercial banks in Taiwan based on the data in the 2009 Financial Statistics Abstract of Taiwan. Of these 42 commercial banks in Taiwan, the general managers

are the potential respondents of the survey in this study. So, the elements of sampling units are the general managers of these 42 commercial banks in Taiwan. Once the sampling size was ascertained, telephone calls prior to the distribution of questionnaires via mails were made to these general manager offices of the 42 commercial banks in Taiwan. The authors collected the contact telephone numbers and addresses of the headquarters of these 42 commercial banks in Taiwan from the release of The Bankers Association of the Republic of China (Taiwan). The authors carried e-mail verifications via telephone so that electronic versions of the questionnaire can be sent out. To increase the response rate, the authors conducted follow-up telephone calls twice two weeks after the initial mailings and e-mailings of questionnaires. Screening was carried out after the questionnaires were collected (Wu & Tu, 2008, p. 24). Of the 42 respondents, 31 completed responses were returned amassing 73.8% response rate. The sample size was deemed adequate for further statistical analysis. Gay (1992) proposed that the respondents should exceed 30 when conducting statistical tests like correlation and regression. In completion of the fieldwork, reliability tests, factor analysis and regression were carried out.

6. Results

Reliability test was carried out on each of three constructs, i.e. CRM implementation, customer satisfaction and perceived business performance. Reliability test was conducted to gauge the internal consistency of the constructs in a summated scaled. The Cronbach's α of each construct exceeds 0.8, hence retaining all variables for further statistical analyses. Simultaneously item-total correlation was carried out on the 41 items in the questionnaire. The cut-off point of an acceptable item-total correlation is 0.5 or above (Hair, Anderson, Tatham, & Black, 2006). Results of item-total correlation showed that all items, except for one, were above 0.5. Therefore one item in the questionnaire was omitted.

Subsequently factor analysis was performed on the 40 interval-scaled items of the questionnaire where 21 items were manifesting CRM implementation, 10 were customer satisfaction and 9 were perceived business performance. Nine factors with eigenvalue exceeding 1.0 were extracted; ie 5 factors were from CRM implementation, 2 from customer satisfaction and 2 from perceived business performance. The Cronbach's α of the 5 factors extracted from CRM implementation were 0.927, 0.868, 0.860, 0.823, and 0.865 respectively. The factor loadings of these five extracted factors are between 0.540 and 0.897. Since the overall internal consistency (Cronbach's α reliability) of CRM Implementation is 0.941, the reliability of the 5 factors extracted from CRM implementation. These five extracted factors were later labelled as *acquisition management, contact rate management, regular evaluation management, increasing selling management*, and *recovery management*.

Meanwhile, factor analysis was carried out on the items manifesting customer satisfaction. Two factors with eigenvalue exceeding 1.0 were extracted and the Cronbach's α of these two extracted factors were 0.864, and 0.802 respectively. The loadings of these two extracted factors were between 0.594 and 0.869. As the Cronbach's α of the construct customer satisfaction was 0.846, the reliability of the 2 extracted factors was decent. These two extracted factors were then labelled as *retention* and *loyalty*. The final factor analysis was conducted on the items manifesting the construct perceived business performance. Similar to customer satisfaction, 2 factors with eigenvalue exceeding 1.0 were extracted. The Cronbach's α of these two factors were 0.868 and 0.828 respectively. The factor loadings of these two extracted factors were between 0.577 and 0.966. These reliability values of the two extracted factors were decent and relatively comparable with the Cronbach's α of the perceived business performance construct which was 0.881. These two extracted factors were labelled as *employee sentiments* and *benchmarking*.

To test the causal effects of CRM Implementation on customer satisfaction and perceived business performance, multiple linear regression analysis was carried out. The five extracted factors of CRM (*acquisition management*, *contact rate management*, *regular evaluation management*, *increasing selling management* and *recovery management*) are independent factors while the two extracted factors of customer satisfaction (*retention and loyalty*) and perceived business performance (*employee sentiments* and *benchmarking*) are dependent factors. Therefore 4 regression outputs were expected. The total variance explained was 0.420 for Retention and 0.809 for Loyalty. The R² is 0.656 for Employee Sentiments but there is no significant linear correlation between CRM Implementation and Benchmarking (p=0.079> .05). Thus, the model helps highlight some factors that are associated with more successful CRM implementation (see Table 1).

Insert Table 1 here

6.1 CRM Implementation and Customer Satisfaction

Based on the hypothesis derived earlier, CRM implementation is positively associated with Customer Satisfaction (H1). Association is the strongest for Increasing Selling Management (β =.658, p=.000), Acquisition

Management (β = .375), and Regular Evaluation Management (β = .375) in Loyalty. Notably, the association between Recovery Management and Loyalty is negative and marginal (β = -.309). Association is the strongest for Contact Rate Management (β = .532, p=.002) and marginal for Recovery Management (β = .370) in Retention. Thus, it seems that there is sufficient evidence to suggest that high frequency of CRM engagements can lead to improved customer satisfaction. To sum up, H₁ is asserted.

6.2 CRM Implementation and Perceived Business Performance

Similarly, the hypothesis derived earlier suggests that CRM implementation is positively associated with Perceived Business Performance (H2). Association is the strongest for Contact Rate Management (β = .527, p=.002), and Increasing Selling Management (β = .526) in Employee Sentiments. Association is marginal for Regular Evaluation Management (β = .318) in Employee Sentiments. Nor is it significant for either Acquisition Management or Recovery Management. Thus, it seems that the more banks engage in CRM implementation, especially in Contact Rate Management, Increasing Selling Management, and Regular Evaluation Management, the better the Perceived Business Performance is. To sum up, H₂ is asserted.

7. Discussion

The results of this empirical research produced the following notable findings. The multi-dimensional components in a multilevel model are captured. This model suggests that each dimension of the CRM phases has different functional sub-dimensions as presented in Table 1. The data collected support conceptualization for the CRM Implementation construct. This is shown in the study where key activities of CRM Implementation were grouped into five primary dimensions: *acquisition management, contact rate management, regular evaluation management, increasing selling management, and recovery management.* The study then assessed the extent to which the five dimensions are implemented in commercial banks of Taiwan. This is a salient contribution because the results of this paper represent a meaningful research towards development of what comprises a standard for defining the nature of CRM Implementation in Taiwan. Consequently, a common ground of CRM Implementation was established, and the following conceptualized framework can be employed as a guide for further research (see Table 2).

Insert Table 2 here

The findings indicate that the five dimensions derived from the CRM implementation construct are positively associated with customer satisfaction. The strongest association comes from *acquisition management*, *regular evaluation management*, and *increasing selling management*, followed by *contact rate management* and *recovery management*. Nevertheless it is important to highlight that the support for *recovery management* (even in the negative direction for Loyalty) is marginally significant. A bank expects to obtain some form of ROI generated from CRM activities in which it invested. However, in a practical sense this may not always happen in all CRM initiatives due to uncertainties and other unforeseen circumstances. In the case of *recovery management*, two likely reasons are presented. First, *recovery management* in addressing lost customers who are profitable was underestimated by banks, hence implementation was not effectively initiated. Second, banks are probably reluctant to re-establish a relationship with lost customers, who were carelessly defined as unprofitable (Yao & Khong, 2008).

The findings indicate that the implementation of CRM is positively associated with perceived performance. Of the five dimensions, three had significant association. The strongest effects come from *contact rate* management, *increasing selling management* and *regular evaluation management*. The effects from *acquisition management* and *recovery management* are not significant. As mentioned in the literature, the acquisition phase describes the initiation of a customer-bank relationship. This is a familiarisation phase where the customer and bank will get used each other. The customer obtains preliminary experience with the bank's services and products, which enables the bank to collect customer information for subsequent preparation of offerings. As the customer acquisition and familiarization phases entail start-up costs, this former may not generate profit initially. However, from a long term perspective, banks will find that these initial expenses will have a significant contribution to the performance of the firm (Gupta *et al.*, 2004). For recovery management, this result echoes the negative association between recovery management and loyalty. Therefore a possible explanation is that recovery management of lost customers who are profitable was underestimated as banks not implement it effectively.

8. Conclusion

The findings of this study show the following implications for bank managers in the commercial banks in Taiwan. First, this study provides a comprehensive outline of the CRM initiatives that take has taken place at each main phase. Thus, the model presented can be used to identify the key success factors of CRM. Second, the

results show that CRM-Customer Satisfaction and Perceived Business Performance links are as strong as suggested in the literature. The findings also indicate that recovery management in profitable customers who left the bank was underestimated. Consequently this finding echoes the conclusion that banks do not implement recovery activities effectively. Finally, the finding also reflects the idea that the customer base within banks may be unstable due to intense competition within the industry and CRM should be used as a tool to build retention strategies.

Although this research provided meaningful findings, limitations in any research studies are inevitable. First, CRM implementation is a long-term effort. There can more longitudinal studies to further confirm its effectiveness in a dynamic industry like banking. For instance, the negative effect of ROI in IT in the short term may not be necessarily so over time. In short, IT investment may be realized in the long run. Second, each questionnaire was completed by a representative of a bank, i.e. the general manager, in each bank investigated. Subsequently, common-method variance may exist. Finally, this study only dealt with the customer-interface (e.g. touchpoints) relationship level. For a comprehensive picture of CRM implementation in the field of banking, all three levels, i.e. functional, customer-facing and strategic levels, are expected to be investigated in future studies.

References

Anderson, E.W., Fornell, C., & Mazvancheryl, S.K. (2004). Customer Satisfaction and Shareholder Value. *Journal of Marketing*, 68 (October), 172–185. http://dx.doi.org/10.1509/jmkg.68.4.172.42723

Berger, P.D., Bolton, R.N., Bowman, D., Briggs, E., Kumar, V., Parasuraman, A., & Creed, T. (2002). Marketing Actions and the Value of Customer Assets. *Journal of Service Research*, 5(August), 39–54. http://dx.doi.org/10.1177/1094670502005001005

Blattberg, R.C., Getz, G., & Thomas, J.S. (2001). *Customer Equity: Building and Managing Relationships as Valuable Assets*. Boston: Harvard Business School Press.

Bolton, R. N., Lemon K.N., & Verhoef, P.C. (2007). Expanding Business-to-Business customer Relationships: Modeling the Customer's Upgrade Decision. *Journal of Marketing*, 72(1), 46-64. http://dx.doi.org/10.1509/jmkg.72.1.46

Bolton, R.N. (1998). A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction. *Journal of Marketing Science*, 17(1), 45–65. http://dx.doi.org/10.1287/mksc.17.1.45

Bolton, R.N., & Lemon, K.N. (1999). A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction. *Journal of Marketing Research*, 36(2), 171-186. http://dx.doi.org/10.2307/3152091

Bontis, N., Chua, C.K., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian Industries. *Journal of Intellectual Capital*, 1(1), 85-100. http://dx.doi.org/10.1108/14691930010324188

Boulding, W., Kalra, A., & Staelin R. (1999). The Quality Double Whammy: The Rich Get Richer. *Journal of Marketing Science*, 18(4), 363-384. http://dx.doi.org/10.1287/mksc.18.4.463

Davenport, T.H., Harris, J.G., & Kohli, A.K. (2001). How Do They Know Their Customers So Well? *Sloan Management Review*, 42(Winter), 63–73.

Dwyer, R.R., Schurr, P.H., & Oh, S. (1987). Developing Buyer–Seller Relations. *Journal of Marketing*, 51 (April), 11–28. http://dx.doi.org/10.2307/1251126

Fornell, C. (2007). The Satisfied Customer: Winners and Losers in the Battle for Buyer Preference. N.Y.: Palgrave Macmillan.

Gay, L.R. (1992). Educational Research Competencies for Analysis and Application. New York: Macmillan.

Gilbert, G.R., & Veloutsou, C. (2006). A Cross-Industry Comparison of Customer Satisfaction. *Journal of Services Marketing*, 20(5), 298-307. http://dx.doi.org/10.1108/08876040610679918

Guest, D.E. (1997). Human resource management and performance: a review and research agenda. *Journal of Human Resource Management*, 8(3), 263-276.

Gupta, S., Lehmann D.R., & Stuart, J.A. (2004). Valuing Customers. *Journal of Marketing Research*, 40 (February), 7–18. http://dx.doi.org/10.1509/jmkr.41.1.7.25084

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2006). *Multivariate Analysis* (6th ed.). New Jersey: Prentice Hall International.

Haywood, K.M. (1989). Managing Word of Mouth Communications. *Journal of Services Marketing*, 3(2), 55-67. http://dx.doi.org/10.1108/EUM000000002486

Heskett, J.L., Jones, T.O., Loveman, G., Sasser, W.E. Jr., & Schlesinger, L.A. (1994). Putting the Service-Profit Chain to Work. *Harvard Business Review*, 72(2), 164–174.

Hogan, J.E., Lemon, K.N., & Rust, R.T. (2002). Customer Equity Management: Charting New Directions for Future of Marketing. *Journal of Service Research*, 5 (1), 4–12. http://dx.doi.org/10.1177/1094670502005001002

Kamakura, W.A., Mittal, V., de Rosa, F., & Mazzon, J.A. (2002). Assessing the Service Profit Chain. *Journal of Marketing Science*, 21 (Summer), 294–317. http://dx.doi.org/10.1287/mksc.21.3.294.140

Kaplan, R.S., & Norton, D.P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, (Jan-Feb), 75-85.

Khong, K.W. (2003). An Examination of the Critical Success Factors of the Business Process Re-Engineering Implementation Process in Malaysian Domestic Banks and Financial Companies. Unpublished doctoral thesis, Multimedia University, Malaysia.

Kotler, P., & Armstrong, G. (2002). Principles of Marketing, (9th ed.). Taipei: Tung-Hwa.

Kumar, V., & Reinartz, W. J. (2006). *Customer Relationship Management: A Databased Approach* (1st ed.). New York: John Wiley & Sons, Inc.

Liu, Y. (2006). Word-of Mouth for movies: Its Dynamic and Impact on Box Office Revenue. *Journal of Marketing*, 70 (July), 74-89. http://dx.doi.org/10.1509/jmkg.70.3.74

Misner, I.R. (1999). The World's Best Known Marketing Secret: Building Your Business with Word-of Mouth Marketing (2nd ed.). Austin: Bard Press.

Mithas, S., Krishnan, M.S., & Fornell, C. (2005). Why Do Customer Relationship Management Applications Affect Customer Satisfaction? *Journal of Marketing*, 69(October), 201–209. http://dx.doi.org/10.1509/jmkg.2005.69.4.201

Moorthy, S., & Srinivasan, K. (1995). Signaling Quality with a Money-Back Guarantee: The Role of Transaction Costs. *Journal of Marketing Science*, 14(4), 442-446. http://dx.doi.org/10.1287/mksc.14.4.442

Morales, A.C. (2005). Giving Firms an "E" for Effort: Consumer Responses to High-Effort Firms. *Journal of Consumer Research*, 31 (March), 806-812. http://dx.doi.org/10.1086/426615

Morschett, D. (2006). Firm-Specific Influences on the Internalization of After-Sales Service Activities in Foreign Markets. *Journal of Services Marketing*, 20 (5), 309-323. http://dx.doi.org/10.1108/08876040610679927

Mulhern, F. (1999). Customer Profitability Analysis: Measurement, Concentration, and Research Directions. *Journal of Interactive Marketing*, 13 (Winter), 25–40.

Niraj, R., Gupta, M., & Narasimhan, C. (2001). Customer Profitability in a Supply Chain. *Journal of Marketing*, 65 (July), 1–16. http://dx.doi.org/10.1509/jmkg.65.3.1.18332

Oliver, R.L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63 (Special Issue), 33-44. http://dx.doi.org/10.2307/1252099

Ratchford, B.T. (2001). The Economics of Consumer Knowledge. Journal of Consumer Research, 27(4), 397-409. http://dx.doi.org/10.1086/319617

Reichheld, F.F., & Sasser, W.E. Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68(5), 105-11.

Reinartz, W., Krafft, M., & Hoyer, W.D. (2004). The CRM Process: Its Measurement and Impact on Performance. *Journal of Marketing Research*, 41 (August), 293–305. http://dx.doi.org/10.1509/jmkr.41.3.293.35991

Rust, R.T., Lemon, K.N., & Zeithaml, V.A. (2001). Driving Customer Equity: Linking Customer Lifetime Value to Strategic Marketing Decisions. *Marketing Science Institute*, Working Paper No. 01-108.

Rust, R.T., Zahorik, A.J., & Keiningham, T.L. (1995). Return on Quality (ROQ): Making Service Quality Financially Accountable. *Journal of Marketing*, 59(April), 58–70. http://dx.doi.org/10.2307/1252073

Sharma, A., Levy, M., & Kumar, A. (2000). Knowledge Structures of Salespeople as Antecedents of Retail Sales Performance: An Empirical Examination. *Journal of Retailing*, 76(1), (Spring), 53-69. http://dx.doi.org/10.1016/S0022-4359(99)00023-8

Shoemaker, M.E. (2001). A framework for examining IT-enabled market relationships. Journal of Personal

Selling & Sales Management, 21(2), 177-186.

Smith, A.K., & Bolton, R.N. (1998). An Experimental Investigation of Customer Reactions to Service Failure and Recovery Encounters: Paradox or Peril? *Journal of Service Research*, 1(1), 65-81. http://dx.doi.org/10.1177/10946705980010010

Tuli, K.R., & Bharadwaj, S. (2009). Customer Satisfaction and Stock Returns Risk. *Journal of Marketing*, 73 (November), 184-197. http://dx.doi.org/10.1509/jmkg.73.6.184

Villanueva, J., Yoo, S., & Hanssens, D.M. (2008). The Impact of Marketing-Induced vs. Word-of-Mouth Customer Acquisition on Customer Equity Growth. *Journal of Marketing Research*, 45(February), 48-59. http://dx.doi.org/10.1509/jmkr.45.1.48

Wu, M.L., & Tu, C. T. (2008). SPSS and the Application and Analysis of Statistics. Taipei: Wu-Nan.

Yao, H.I., & Khong, K.W. (2011). Effectiveness of Customer Relationship Management on Customer Satisfaction in the Commercial Banks of Taiwan. *Contemporary Management Research Journal*, 7(1), 1–12.

Yao, H.I., & Khong, K.W. (2008). Effectiveness of CRM on Customer Satisfaction and Performance in the Internet Banking of Taiwan. *The 30th Annual Marketing Science Conference of the INFORMS*, University of British Columbia, Canada.

Zeithaml, V.A., Parasuraman, A., & Berry, L.L. (1990). Delivering Quality Service. New York: Free Press.

Zeithaml, V.A., Rust, R.T., & Lemon, K.N. (2001). The Customer Pyramid: Creating and Serving Profitable Customers. *California Management Review*, 43(4), 118–142.

Zhang, H. (2005). Share Price Performance Following Actual Share Repurchases. *Journal of Banking and Finance*, 29, 1887-1901. http://dx.doi.org/10.1016/j.jbankfin.2004.06.038

	Customer Satisfaction		Perceived Business Performance	
CRM Implementation Dimensions	Retention	Loyalty	Employee Sentiments	Benchmarking
	β		β	
Acquisition management	-	0.375**	-	-
Contact rate management	0.532**	-	0.527**	-
Regular evaluation management	-	0.375**	0.318**	-
Increasing selling management	-	0.658**	0.526**	-
Recovery management	0.370**	-0.309**	-	-

Table 1. Results showing the significant associations between Customer Satisfaction, Perceived Business Performance and CRM Implementation

Note: ****** denotes significance at 0.01

* denotes significance at 0.05

Phases	Tasks	Instruments	
Acquisition	Customer Persuasion	* Quality guarantee * Recommendation	
	Customer Stimulation	* Short-term stimulation* Long-term stimulation	
Enhancement	Contact Rate	* Frequency of personal contact	
		* Perceived exchange quality	
		* Empowerment* Multiple contact channels	
	Regular Evaluation	* Regular evaluation and segmentation of profitability	
	Increasing Selling	* Regular transaction and cross-selling	
		* Up-Selling * Customized Offering	
		* Setting up switching barriers	
		* Lower service costs	
Recovery	Recovery	* Error rectification in the marketing mix and service	
		* Recovery offers in the marketing mix and service	
		*Added value in the marketing mix and customized service	

Table 2. Overview of the regression results

Source: Yao and Khong (2011)

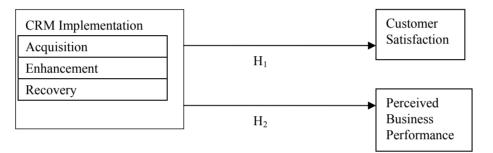


Figure 1. A conceptual model of CRM implementation