

Electronic Customer Relationship Management Performance: Its Impact on Loyalty From Customers' Perspectives

Nor Azila and Mohd Noor

Abstract—Undeniably, the telecommunication industry is changing radically. Today, communication is becoming the nerve of the life. In particular, mobile phone service industry is gaining popularity and importance all around the world and as mobile usage is growing rapidly, telecommunication marketers are developing new strategies to take advantage of the potential customers. Companies including communication companies are putting much more emphasis on customer relationship management (CRM) as a tool for managing customer relationship and to increase customer satisfaction and loyalty. E-CRM emerges from the internet and web technology to facilitate the implementation of CRM. E-CRM performance as the amount of improvement that companies achieve in customer relationship strength, sales effectiveness, and marketing efficiency after implementing CRM technology. This study examines the influence of e-CRM performance on customer loyalty in Jordanian telecommunication industry. Data were gathered from students in various universities in Jordan using survey method. Using regression analysis, the results supported that e-CRM performance significantly related to customer loyalty. The theoretical implications and managerial implications of these findings are discussed.

Index Terms—Customer loyalty, customer relationship management (CRM), e-customer relationship management performance, mobile phone services.

I. INTRODUCTION

In today's competitive and changeable market place, mobile phone service industry is gaining popularity and as mobile usage is growing rapidly, telecommunication marketers are developing new strategies to take advantage of the potential customers. Mobile phone is the most promising and high growth area of telecommunication, with more than 1.7 billion global subscribers and about 80% of the world's population covered by mobile networks [9]. Mobile phone is becoming so popular that people are leave landline to rely completely on mobile phones primarily because of mobility, safety, price and privacy [1]. Furthermore, one of the greatest benefits is the international roaming service capability, which gives consumers the ability to use same number to contact others in many countries any time anywhere.

Recently, customers can go to market with more knowledge, choices and value that new technology has brought to customers' daily lives. Usage of mobile phones has now extended from voice communications to the internet. An increase in extension of mobile internet technology and

much development of m-commerce applications has opened great opportunity for mobile service users. In addition to voice and text services, global system for mobile communications firms' also offer internet browsing, email, broadcasting services, multimedia services (MMS), rings tones, video calls and access to mobile banking. Developed mobile phones (handsets), on the other hand, provide personal organizers, built-in cameras and camcorders, games, music playback radio, push-to-talk, infrared and Bluetooth connectivity, and ability to watch video and TV services [31]. This indicates that the new mobile phone device can now provide users with many facilities to ensure customer enjoyment, satisfaction and loyalty. The objective of service companies that offer communication services is to develop services to satisfy the customers. In due time, satisfied customers will be those that will be loyal and help the company to sustain business. It should be observed that retention of existing customers is much cheaper than acquiring a new customer; therefore, companies including communication companies are putting much more emphasis on customer relationship management (CRM) as a tool for managing customer relationship and to increase customer satisfaction and loyalty.

Customer relationship management (CRM) is replacing the traditional 'four Ps' of marketing - product, price, place and promotion. Long-term relationships with customers are the key to stability in an increasingly dynamic market [30]. Customer relationship management (CRM) has become the main strategy to retain customers for companies regardless of its size. It has been regarded as a comprehensive strategy and process of acquiring, retaining, and collaborating with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply-chain functions of the organization, to achieve greater efficiencies and effectiveness in delivering customer value [19]. Customer relationship management (CRM) has become the main strategy to retain customers for companies regardless of its size. The reason for this is that it costs up to five times more to acquire a new customer than to get an existing customer to make a new purchase [26]. With the advent of the internet and new technology, a new concept of CRM is born and changed into electronic Customer Relationship Management (e-CRM) or Web-based CRM [18]. This includes all the processes needed to be acquired, built and maintain customer relationship through e-business operations.

Like any other countries in the Middle East, Jordan has developed rapidly in various social and economic fields over the last few years. Telecommunications sector in Jordan proves itself to be one of the most successful and dynamic sectors and has expanded considerably in the last few years.

Manuscript received March, 4, 2011. This work was supported in part by the College of Business, Northern University of Malaysia (UUM). Nor Azila is currently an Associate Professor at College of Business, Northern University of Malaysia (UUM). She can be contacted by phone: 604-9285206; fax: 604-9285261; email: azila@uum.edu.my.

Looking into the scenario in Jordan, with the continued growth in service sector, the mobile phone service industry has enormous potential for growth. The telecommunications sector has achieved remarkable developments on more than one front, including the regulatory and legislative domains, infrastructure, new services, and improving the services quality at more reasonable prices. For example, recently, Jordan has seen the liberalization of the fixed telecommunications sector and significant expansion of the mobile communications market. This progress has resulted in substantial benefits to the public, not only in the availability and in affordability of services but also in the degree of choices afforded to the subscriber. The role of the Telecommunications Regulatory Commission (TRC) in this expansion, and its ongoing role for the future will continue to focus on creating and maintaining an environment, which fosters continued investment, encourages competition and delivers substantial benefits to the subscribers because of enhanced levels of competition in Jordan.

Lately, technological change has shifted competition from price and core service to value-added services [3]. Due to the many alternatives available to customers, they can easily switch service providers. The telecommunication industry has one of the highest customer churn rates in the business world, often exceeding 40 percent annually [9]. Furthermore, mobile phone service providers are losing 2-4 percent of their subscribers monthly; disloyal customers can amount to millions of lost revenue and profit. Theoretically speaking, customers intend to switch service provider when they are not loyal and satisfied.

The standards of professionalism in e-CRM and mobile phone service should be raised in response to the shift in customer's needs and preference. Accordingly, managing customer's expectations, needs and desires has become a major concern of service providers due to various factors such as keen business competition, liberalization of the industry to Foreign Service providers, ease of switching service provider to competitors and increasing customer preference and needs. To remain competitive in the market place, the mobile phone service providers have to create new business models and produce innovative content and applications that would attract and retain consumers. Therefore, by implementing e-CRM, they can provide services based on customer need and expectations [12]. However, despite the importance of CRM to the success of the organization, empirical studies on e-CRM performance particularly in the Jordanian context have been less than encouraging. Furthermore, little systematic effort been taken to understand the underlying consequences of e-CRM performance. Therefore, an empirical study is needed to overcome this shortcoming.

II. LITERATURE REVIEW

Customer relationship management (CRM) is a new concept within businesses that has increased its importance dramatically over the last few years, and will continue to do so in the future. CRM exists to replace the traditional 'four Ps' of marketing (product, price, place and promotion) [31]. A number of authors propose that the 4Ps of marketing mix is

no longer the dominant marketing logic and that Relationship Marketing may be a more appropriate new paradigm for marketing thought, theory and practice [12]. CRM was born from relationship marketing and is simply the practical application of long standing relationship marketing principles that have existed since the dawn of business itself [12]. CRM provides management with the opportunity to implement relationship marketing on a company wide basis effectively. CRM is a tool and process that allows an organization to identify, understand and serve customers to improve customer service, retain valuable customers, and help provide analytical capabilities [7]. CRM is the driving force that enables the characterization of customer and increases the customer value. In addition, CRM helps companies to retain customer loyalty. It is not only for managing customers and for monitoring their behaviour; it also has the potential to change and improve customer relationship with the service provider and increase business revenue [5]. Implementing CRM successfully can bring several benefits and profits to the companies and help to get mutual benefits from both parties. [2] indicates that CRM could bring many benefits for companies to enhance their ability in the competitive market, increase profits and profit rate, reduce costs, upgrade concentration of the market, reduce cycle times of implementation of new sales activities, increase times of small-sized target marketing and increase knowledge. Whereas, [10] indicate that several benefits might be derived from CRM, namely; increase customer loyalty, more effective marketing, improve customer service and support, and greater efficiency and cost reduction.

After the advent of internet and new technology, CRM has been converted to electronic CRM (e-CRM). E-CRM is a combination of hardware, software, process, applications and management commitment to improve customer service, retain customer, and provide analytical capabilities [18]. Many companies have spent large amounts of money pursuing the development of a comprehensive e-CRM strategy in an attempt to implement e-CRM. However, despite the large investment made on e-CRM, many companies are dissatisfied with e-CRM implementations, because e-CRM projects are not creating measurable income on investment [1]. The aim of e-CRM systems is to increase customer service, retain customers, provide analytical capabilities, increase customer value and use the proper methods to encourage customers to remain loyal [33]. The primary goal of e-CRM is to increase incomes and profits while reducing costs. To reach this goal, the customer needs to increase his/her transactional dealings with the service provider. If transactions are made more convenient, useful and less expensive for the customer, it is likely that such customer will give service provider repeat business [7]. Satisfaction is considered to be an immediate goal of e-CRM. It is assumed to determine the medium-term goals (e.g., customer retention and loyalty) and subsequently firm performance [2]. E-CRM is designed for people at all levels in business who wants to develop relationships with customers electronically. Because of that, it is critical to understand the important role that e-CRM plays within modern marketing organizations.

To date, the primary focus of research has focused on the impact of e-CRM performance from customers and organizational perspective. Studies found several positive outcomes of e-CRM performance such as customer satisfaction [14, 17], purchase intentions [14, 29], customer retention [13], knowledge management [8], profitability [15], relationship development [25], organizational commitment [20; 29] and customer loyalty [16; 4].

Despite e-CRM produce many outcomes such as ability to increase loyalty and provide services and products that suit with customers expectations, little systematic effort has been done to investigate the impact of e-CRM performance towards marketing performance [23]. Measuring marketing performance is necessary from organization and customer behaviour perspective. The present research has chosen customer loyalty to present actual customer behaviour as the consequence of e-CRM performance. The main reason to choose customer loyalty as consequence of e-CRM performance because the main objective of CRM is to translate the customer information into customized products and services that meet customers' expectations in order to gain their loyalty [2].

In today's competitive and changeable market place, customer loyalty is seen to be a critical factor to the success of business organizations because attracting new customers is more expensive than retaining existing ones [6]. Many authors suggested that loyal customers are a competitive asset and that a way of increasing customer retention is through secure and collaborative relationship between customer and service providers [10]. In this study, customer loyalty was chosen as the main consequence of e-CRM performance as the previous literatures support the relationship between them. As example, [16] stressed that little empirical research has been conducted on the link between customer relationship management and customer loyalty within an internet, or e-commerce, context. Their arguments seem that it is necessary to do an empirical research to understand this relationship deeply. [28] hypothesized that customer loyalty is influenced by customer satisfaction in an e-CRM environment, while [32] found that loyalty is an important factor for a long-term relationship between a customer and service provider. Moreover, many other self-service technologies related studies regarding e-commerce and e-service have also suggested that customer satisfaction can increase word of mouth, reuse the service, repurchase and loyalty intentions toward self-service technologies [27].

Recent developments in internet technology have given the impact of e-CRM on customer loyalty is real and so are the problems for certain organizations in terms of successful implementation [33]. Satisfaction may lead to customer retention, customer loyalty, lower customer switching costs and higher income and profitability. Usually loyal customers have a positive attitude towards the service provider, less price-sensitive and less tendency to switch provider. In turn loyal customer has a positive effect on a company's profit and competitive. Customer loyalty is considered one of the major consequences of e-CRM performance. Previous research indicates that increasing customer retention (or customer loyalty) by 5 percent could lead to 25-75 percent profit

growth. In addition, [21] explained that a 5 percent rise in customer loyalty can simply result in up to 125% percent increase in profits. The study by [16] demonstrated that e-CRM performance could enhance customer loyalty. Study by [4] also offers empirical support for the relationship between e-CRM performance and customer loyalty.

In relation to the Jordanian context, given the highly competitive nature of mobile phone service industry, with many service offering and numerous choices and facilities, customer becomes a king and the market is a customers' market. Service provider focus on every single customers, which require the company effort to be organized around the customer rather than the product or services in response to market pressures, service providers seeking to understand the varying needs of customers and customizing service offering to enhance customer satisfaction and loyalty. Furthermore, Jordanian subscribers usually stick with service provider who have served them well and then remain loyal and recommends their relatives and friends. By contrast, subscribers in Jordan have no problems about switching to competitors if they are not satisfied. The study by [27] demonstrated that customer loyalty is influenced by customer satisfaction in an e-CRM environment. Moreover, many other self-service technologies related studies regarding e-commerce and e-service have also revealed that customer satisfaction can increase word of mouth and reuse/repurchase/loyalty intentions [21]. [16] confirmed that customer loyalty could be enhanced when used within an internet context. The result supports the need to develop relation markets to achieve customer loyalty. They found that e-CRM implementation effort correlates with the perceived degree of e-CRM received. In turn, this is linked to the loyalty experienced by a virtual customer towards the e-retailer. Based on the importance of customer loyalty in service sector in general, and particularly in mobile phone service industry, this research attempts to investigate the relationship between e-CRM performance and customer loyalty. This research hopes to contribute further to the importance of customer loyalty as a practical way to increase the service provider profit and achieve the mutual benefits between customer and service providers in Jordan.

III. METHODOLOGY

The sample for this study consists of university students. Many previous studies have employed university students as subjects. University students belong to a specific population [15]. Furthermore, [7] stated that university students were the heaviest users of mobile phone followed by high school students and non-student adults. In addition to that, another study conducted in Taiwan found that the students share similar characteristics, economic ability, and consumption behaviour. Adopting students as survey sample is typically considered more applicable to online transactions [12].

In this research, students were chosen as the study samples for several reasons. Firstly, using university students for this study was appropriate because this group is an important target market for mobile phone services providers [31]. The students represent professional users who handle typical

mobile phone service activity such as SMS, chatting, games and other services. Furthermore, in a recent study of mobile phone usage, consumers in the 18-24 year age group used mobile phones 71% more than the average for all age groups [29]. Additionally, [30] chose university students in their study on e-retailing research because they can use the internet for communication and commercial transactions and are a representative appropriate sample for such studies.

Secondly, university students are involved in a challenging modern education like m-learning, e-learning and distance learning. They are qualified in using the services. Thirdly, the nature of work that students do in universities requires the use of mobile phone service. For example, it is common for university staff and students to use the mobile phone for communication or to conduct research and contact their friends and lecturers when discussing some academic issues. Fourthly, university students typically have considerable experience with different types of e-commerce, e-services and websites. Students are very active users of internet applications and participants in e-services activities [3]. Respondents' experience is critical to determine the level of the services in mobile phone service industry. In this study, respondents with more than one year of experience were chosen. The requirement to select only those with more than a year experience was necessary to ensure that all respondents have some knowledge and experience in mobile phone service usage so that they were able to answer the questionnaire accurately. In other words, with more than a year experience the respondents will be able to determine the mobile phone company performance in terms of receiving services and saving cost.

Data were collected by self-report questionnaires from several universities in Jordan. For data collection purposes, 850 questionnaires were distributed to the students. Out of this number, 667 were returned, 95 of which were excluded because they did not subscribe to any mobile phone service and 84 questionnaires were incomplete (missing responses). Thus, a total of 488 responses were usable and used for subsequent analysis, giving a response rate of 57.41 percent. It was found that 42.4% respondents were male and 57.6% were female with majority at the age 20-30 years old. With regards to academic status, 7.6% of the respondents were doctoral degree students, 18.2% were masters degree while 74.2% were under graduate students.

In relation to measurement, it is believed that e-CRM performance should be measured in terms of customer-based behaviours since they are the underlying sources of value of current customers of a firm and have the potential to increase the future income streams associated with them and those prospective customers [30]. Electronic customer relationship management performance is operationalized by two dimensions namely tangible and intangible aspects. Tangible aspects refer to customer behaviour-based CRM performance such as customer retention, repurchase, cross buying and word-of-mouth, while the intangible aspect of CRM performance is represented by customer satisfaction. Tangible aspects refer to customer behaviour-based CRM performance such as customer retention, repurchase, cross buying and word-of-mouth, while the intangible aspect of CRM performance is represented by customer satisfaction

and brand loyalty [30]. Retention means the intent of customers to keep close relationship for a longer period of time with service provider. Good word-of-mouth refers to the customer intention to recommend the offerings to others positively, and repurchase refers to the customer decision to accept the new offerings and reuse mobile service more, and cross buying refers to the customer's practice of buying additional products and services from the existing service provider in addition to the ones she/he currently has. On the other hand, brand loyalty refers to a customer's favourable attitude toward service provider and customer satisfaction is refers to how products and services supplied by service provider meet users' expectations. E-CRM performance is operationalized based on nine items adopted from [30]. The measure for customer loyalty proposed in the present study was adapted from [7] and operationalized as three dimensions that is length of relationship, trust and commitment. These dimensions consisted of seven self-rating items on a five-point Likert scale format. As shown in Table 1, all the measures were reliable.

IV. RESULTS

To test the relationship between e-CRM performance and customer loyalty, correlation and regression analysis were conducted. Table 2 below shows the correlation structure of the data used in this study.

As Table 2 shows, positive correlations exist between e-CRM performance and customer loyalty ($r = .36; \rho < .01$). In order to identify the strength of the relationship and to explore the predictive ability of e-CRM performance on customer loyalty, regression analysis was carried out. The results obtained as shown in Table 3 reveal that e-CRM performance was found to be significant in the prediction model. The results provide support for a positive relationships between e-CRM performance and customer loyalty ($\beta = 0.65; \rho < .01$).

TABLE I. MEANS (M), STANDARD DEVIATIONS (SD) AND RELIABILITIES OF MEASURES (∞)

Variable	M	SD	∞
e-CRM performance	3.97	.47	.86
Customer Loyalty	3.84	.46	.90

TABLE II. CORRELATION MATRIX AMONGST CONSTRUCTS

	e-CRM performance	Loyalty
e-CRM performance	1.0	
Loyalty	.36**	1.0

** $\rho < 0.01$

TABLE III. THE INFLUENCE OF E-CRM PERFORMANCE ON CUSTOMER LOYALTY

Variable	B	SEB	β
e-CRM performance	0.64	0.03	0.65

** $\rho < 0.01$

Note: $R^2 = 0.42$; $F = 345.98$; Sig. $F = 0.00$; * $\rho < .05$; $B =$ Unstandardized Beta Coefficients; $SEB =$ Unstandardized Coefficients Standard Error; $\beta =$ Standardized Beta Coefficients

V. DISCUSSION AND MANAGERIAL IMPLICATIONS

The regression analysis undertaken revealed that e-CRM performance was positively related to customer loyalty and e-CRM performance explains a large percent of the variation in customer loyalty. This indicates that e-CRM performance has a large explanatory power to predict customer loyalty and explains nearly 42 percent of the variance. A few studies conducted in e-CRM performance produce different contribution value on customer loyalty. For example [4] in their study found around 75 per cent of the variation among Taiwanese. Additionally, [28] found a positive relationship between the amount of e-CRM on a website and customer satisfaction and loyalty with the website.

The positive relationship between e-CRM performance and customer loyalty in this study is consistent with previous finding of [24]. [31] found that e-CRM is a critical success factor in electronic commerce. Also, [16] found that e-CRM can directly improve customer loyalty of the internet customers. The notion that e-CRM is able to increase customer loyalty relies on the research conducted by [11] who found that loyal customers increase profitability [5, 22]. In addition, [1] discovered that e-satisfaction has a positive effect on customer loyalty.

Our establishment of a positive association between e-CRM performance and customer loyalty among mobile phone service users in Jordan lends credence to the findings of the majority of the empirical efforts which have explored the relationship between e-CRM performance and customer loyalty in various national contexts. The positive relationship between e-CRM performance and customer loyalty means that the higher customers satisfied, repurchase, and give good word of mouth on the mobile phone service provider, the higher they tend to perceive longer relationships, trust and commitment with the service provider. Customer loyalty will continue to play key roles in mobile phone service success. [27] argued that customer loyalty is subordinate to customer satisfaction in an e-CRM environment and customer loyalty is positively related to behavioral intentions and word-of-mouth behavior. This finding highlights the importance of managing customer relationship because it encourages them to adopt the mobile phone services for a longer period. Although the contribution of e-CRM performance on customer loyalty is not very high towards the services, the result of this research still supports the theoretical relationship between e-CRM performance and customer loyalty.

In the Jordanian mobile service market, there are four service providers. However, due to the market's growth rate and increasing numbers of subscribers that reach 5.7 million the market has reached its maturity in Jordan. Therefore, acquiring new customers is costly and difficult in terms of marketing for mobile phone service providers especially when the number of subscribers in Jordan has reached its summit level. Dealing with this tight situation, service providers need to focus more in retaining existing customers by enhancing customer satisfaction and loyalty. In other words, service providers should minimize their subscribers' switching intention. Service providers who wish to pursue e-CRM performance seriously must redesign and decentralize the organization to enable managers to respond

to customer issues effectively. Furthermore, service providers have to move from processing customer in groups to serving individual needs and changing strategies and procedures to better address the customers. On the other hand, managers should focus on encouraging employees to build customer relationship by giving them the opportunity to solve customer problems. By doing so, employees can play a very important role in developing e-CRM performance that leads to customer loyalty.

Additionally, due the rapid development of information and communication technologies (ICT) and high demand from customers, the paradigm of mobile telecommunication services is now shifting from voice-centered communication to a combination of high-speed data communication and multimedia [15]. This change shifts competition from price and core services to value-added services. For this, mobile phone service providers should differentiate their services and guarantee service quality in order to maintain their market share and they have to focus on new services such as internet services, M-learning, mobile phone conference and audio-video services, to name a few. Finally, managers and service providers in telecommunication industry should also consider moving beyond customer satisfaction strategies toward loyalty programs, to enhance customer perceptions and ultimately lead to more positive customer behaviors and loyalty.

VI. CONCLUSION

To sum, the present study has managed to provide some important insight to the influence of e-CRM performance on customer loyalty. In addition, the findings are matched with previous empirical studies in terms of the importance of e-CRM performance and its impact on customer loyalty. Although this study has some interesting findings on the consequence of e-CRM performance on customer loyalty, this study also has several limitations. From a methodological point of view, data in this research were obtained from Jordan university students. It would be useful to obtain a broader sample of respondents in the future studies. This study is concerned about the e-CRM performance and its impact on customer loyalty in mobile phone services in Jordan. Replicating and extending this study in other regions and countries and other services would test the generalizability of the present findings and would provide a basis for an external validation of the relationship discovered in this research to understand the cultural and geographical variations of customer behaviour.

REFERENCES

- [1] T. Alhaiou, T. "How the Implementation of E-CRM Enhances e-Loyalty at Different Adoption Stages of Transactional Cycle? An Empirical Study of Mobile Commerce Website in the UK.," Proc. Brunel Business School PhD Symposium, 23-24 March 200, doi: <http://www.brunel.ac.uk/329/BBS%20documents>.
- [2] M. Almotairi, "CRM Success Factors Taxonomy," Proc. European and Mediterranean Conference on Information Systems 2008 (EMCIS2008), May 2008, pp. 29-35.
- [3] S. Aydin and G. Ozer, "The Analysis of Antecedents of Customer Loyalty in the Turkish Mobile Telecommunication Market," European Journal of Marketing, vol. 39(7/8), 2005, pp. 910-925.

- [4] T.M. Chang, L.L. Liao and W.F. Hsiao, "An Empirical Study on the e-CRM Performance Influence Model for Service Sectors in Taiwan," Proc. IEEE International Conference on e-Technology, e-Commerce and e-Service, IEEE Press, March 2005, pp. 240-245.
- [5] M.G. Dekimpe, J.B.E.M. Steenkamp, M. Mellens and P.V. Abeele, "Decline and variability in brand loyalty," *International Journal of Research in Marketing*, vol. 14, 1997, pp. 405-420.
- [6] A.S. Dick and K. Basu, "Customer Loyalty: Towards an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, vol. 22(2), pp. 99-113.
- [7] Z.S. Dimitriadis, "Customer Satisfaction, Loyalty and Commitment in Service Organizations: Some Evidence from Greece," *Management Research News*, vol. 29(12), 2006, pp.782-800.
- [8] J. Donio, P. Massari, and G. Passiante, "Customer Satisfaction and Loyalty in a Digital Environment: An Empirical Test," *Journal of Consumer Marketing*, vol. 23(7), 2006, pp.445-457.
- [9] D. Fluss, "Customer Retention is a Priority for Mobile Phone Providers," doi: http://www.customerthink.com/article/customer_retention_priority_mobile_phone_providers.
- [10] S. Fournier, S. Dobscha and D. Mick, "Preventing the Premature Death of Relationship Marketing," *Harvard Business Review*, vol. 76(1), 1998, pp. 42-51.
- [11] C. Grönroos, "The Marketing Strategy Continuum: Towards a Marketing Concept for the 1990s," *Management Decision*, vol. 29(1), 1994, pp. 7-13.
- [12] C.I. Gura, "Tailoring e-Service Quality through CRM," *Managing Service Quality*, vol. 13(6), 2003, pp. 520-531.
- [13] S. Jayachandran, S. Sharma, P. Kaufman and P. Raman, "The Role of Relational Information Processes and Technology Use in Customer Relationship Management," *Journal of Marketing*, vol. 69, 2005, pp. 177-192.
- [14] M. Khalifa and N. Shen, "Effects of Electronic Customer Relationship Management on Customer Satisfaction: A Temporal Model," Proc. 38th Annual Hawaii International Conference on System Sciences, January 2005, pp. 171-178.
- [15] J.W. Kim, J. Choi, W. Qualls and J. Park, "The Impact of CRM on Firm and Relationship Level Performance in Distribution Networks," *Communications of the Association for Information Systems*, vol. 14, 2004, pp. 632-652.
- [16] L. Lee-Kelley, D. Gilbert and R. Mannicom, "How e-CRM Can Enhance Customer Loyalty?," *Marketing Intelligence & Planning*, vol. 21(4/5), 2003, pp. 239-248.
- [17] V. McKinney, K. Yoon and F. Zahedi, "The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach," *Information Systems Research*, vol. 13(3), 2002, pp. 296-315.
- [18] D. Norton, "What You Need to Know about e-CRM," 2007, doi: <http://www.techrepublic.com>.
- [19] A. Parvatiyar and J.N. Sheth, *Conceptual Framework of Customer Relationship Management*. New Delhi: Tata McGraw-Hill, New Delhi, 2002.
- [20] M.P. Pritchard, M.E. Havitz and D.R. Howard, "Analyzing the Commitment-Loyalty Link in Service Contexts," *Journal of the Academy of Marketing Science*, vol. 27(3), 1999, pp. 333-348.
- [21] F.F. Reichheld, *The Loyalty Effect*. Boston. MA: Harvard Business School Press, 1996.
- [22] F.F. Reichheld and W.E. Sasser, "Zero Defections: Quality Comes to Services," *Harvard Business Review*, vol. 68(5), 1990, pp.105-111.
- [23] R.T. Rust, V.A. Zeithaml and K.N. Lemon, *Driving Customer Equity: How Customer Lifetime Value is Reshaping Corporate Strategy*. New York: The Free Press, 2000.
- [24] D. Schoder and N. Madeja, "Is Customer Relationship Management a Success Factor in Electronic Commerce?," *Journal of Electronic Commerce Research*, vol. 5(1), 2004, pp. 38-53.
- [25] S. Scullin, J. Allora, G.P. Lloyd and J. Fjermestad, "Electronic Customer Relationship Management: Benefits, Considerations, Pitfalls and Trends," Proc. IS One World Conference, April 2002, pp. 32-38.
- [26] B. Silverstein, *Business-to-Business Internet Marketing*. Florida: Maximum Press, 2000.
- [27] S.A. Taylor and G.L. Hunter, "The Impact of Loyalty with e-CRM Software and e-Services," *International Journal of Service Industry Management*, vol. 13(5), 2002, pp. 452-474.
- [28] S.A. Taylor, K. Celuch and S. Goodwin, "Technology Readiness in the e-Insurance Industry: An Exploratory Investigation and Development of an Agent Technology e-Consumption Model," *Journal of Insurance Issues*, 25(2), 2002, pp. 142-166.
- [29] V. Venkatesh and F.D. Davis, "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies," *Management Science*, vol. 46(2), 2000, pp. 186-204.
- [30] Y. Wang, H.P. Lo, R. Chi and Y. Yang, "An Integrated Framework for Customer Value and Customer-Relationship Management Performance: A Customer-based Perspective from China," *Managing Service Quality*, vol. 14(2/3), 2004, pp. 169-182.
- [31] E. Xavelonaki, "Developing Retention Strategies Based on Customer Profitability in Telecommunications: An Empirical Study," *Journal of Database Marketing & Customer Strategy Management*, vol. 12(3), 2005, pp. 226-242.
- [32] Z. Yang and R.T. Peterson, "Customer Perceived Value, Satisfaction and Loyalty: The Role of Switching Costs," *Psychology & Marketing*, vol. 21(10), 2004, pp. 799-822.
- [33] M. Zineldin, "The Royalty of Loyalty: CRM, Quality and Retention," *Journal of Consumer Marketing*, vol. 23(7), 2006, pp. 430-437.

Nor Azila Mohd Noor is currently a lecturer in the area of Marketing at the College of Business (COB) Northern University of Malaysia (UUM), Malaysia. She obtained her Ph.D in 2005 from University of Science, Malaysia and MSc. in Marketing from University of Stirling, Scotland in 1996. Her research interests include relationship marketing, customer relationship management, green marketing, sales management and retailing. Nor Azila has published articles in *Malaysian Journal of Consumer & Family Economics*, *Journal of Distance Education*, *Management Journal*, *International Journal of Management & Business*, *The Journal of Global Business Management*, *Journal of Quality*, *Journal of Internet Banking and Commerce*, *International Journal of Business & Society* and *International Retail and Marketing Review*.