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The Diffusion of Internet Interactivity on Retail Web Sites: A Customer Relationship Model

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ABSTRACT

The use of internet as an interactive marketing media has captured much attention from managers in their quest for a better relationship with online customers. The belief that serving existing customers are more profitable than acquiring new ones, entailing relationship building effort no longer a choice, but a necessity. This study attempted to uncover the measures of E-CRM program and determining the extent to which these features influence consumer satisfaction and loyalty. The findings revealed that firms should focus on ten relationship marketing measures in order to build enduring consumer relationships. Further, this study provides evidence that the implementation of E-CRM on firm's web site does influence consumer satisfaction leading to loyalty. Finally, managerial implications and limitations of this study are discussed.

Key words: Electronic customer relationship management, consumer satisfaction, loyalty, e-commerce, business-to-consumer, relationship marketing.

INTRODUCTION

Internet technologies provide companies with tools to adapt to changing customer needs and could be used to secure economic, strategic and competitive advantages. Companies that do not take advantage of the Internet technology are viewed as not delivering value added services to their customers, thus are at a competitive disadvantage. In contrast, companies that utilize this technology (at least having a web site that displays corporate and product information) are viewed as progressive and continuously striving to meet the current needs of customers. This general industry trend has created tremendous cost pressures on traditional businesses. Both companies and consumers have acknowledged the Internet as an effective tool for disseminating information. From a marketing perspective, the Internet is not just another marketing tool, it may be a strategic tool to help companies increase customer satisfaction, retain customers and acquire customer loyalty. Hence, the Internet technology is imperative in managing customer relationships for e-businesses.

As the number of Internet companies and users rapidly grows, competition becomes immensely intense. As a result, companies are continuously rethinking ways to generate sales and increase profits. These efforts include, among others, strategizing for the "new paradigm" of relationship marketing (Gronroos, 1994; Zineldin, 2000). When a firm has vast markets with limited direct contact with its customers, a relationship approach is less obvious, but it may still be profitable and it is certainly possible—for example, through the development of information technology and interactive media. Interactivity (Furash, 1999) and the ability to capture useful information via Internet technology have spurred interest in the feasibility of streamlining information provided, forecasting customers needs, understanding preferences, delivering personalized services and enabling customization (Ab Hamid & Kassim, 2004). Thus the impetus of strategizing Customer Relationship Management (CRM) using internet technology as an enabling tool escalates as firms strive to deliver value to customers in an intensified competitive market of cyberspace.

The Use of Internet in Retailing

The Internet has not only changed the way business is conducted but also has penetrated public homes and is becoming a more important tool in day-to-day activities of individuals. For example, there has been a considerable

increase in the number of people who made online purchases in Australia: from 1.2 million users in 2000 to 2.7 million in 2003 (Roy Morgan Research, 2003). In fact, the Internet has positioned itself as one of the most important pre-departure tools for Australian travellers where the Internet medium has received equal vote vis-à-vis the travel agents as the most preferred means for making travel reservations. Meanwhile, a more recent development in Malaysia indicates that Internet users opt for conducting banking activities online as the most popular among all others. The most popular online banking site, Maybank2u.com now handles 2.6 million transactions a month with the transaction rate growing at an average of about 50 per cent each year (Sharif, 2004). Other than online banking, consumers use the Internet for point redemptions (25%), purchasing airline tickets (14%) and movie tickets (13%), online auction (13%), making reservations for accommodation (10%), and purchasing books (8%).

MANAGING CUSTOMER RELATIONSHIPS IN CYBERSPACE

Relationship marketing refers to broader organizational efforts involving personnel across organizations (Zineldin, 2000), directed towards establishing, developing and maintaining customer loyalty and stimulating repeat purchase over time (Foster & Cadogan, 2000). It embraces the idea of treating each customer in an individualized way; delivering individualized products/services to each and every customer (one-to-one marketing) (Moon, 1999).

The World Wide Web, as a front-end application on the Internet acts as the first interaction point between companies and customers in cyberspace, useful to collect information about customers. Arnott et al (2002) suggest that Internet interactivity increase marketers' ability to understand customer behaviour to help them offer products or services according to customers' needs and wants. Information technology enables one-to-one marketing to grow faster as the construction of a customer database or information file may be used to build customer segmentation. Analyses of historical data about customers will reveal customer patterns, behaviour, develop predictive models (Chen & Popovich, 2003), depending upon which firms may identify customers who will provide the most long-term profits from those who are not (Park & Kim, 2003). The Internet has brought new meaning to building customer relationships, that is, large volumes of data can be collected, processed, and analysed efficiently which allows firms to offer personalized products/services to every consumer (Gurau, 2003; Winer, 2001). This distinctive feature of the Internet gives firms the ability to establish an enduring relationship with individual consumers.

E-CRM is a term coined for customer relationship management (CRM) functions delivered on the Internet (Feinberg & Kadam, 2002). It refers to online marketing activities, tools and techniques with the purpose of building and improving customer relationships (Lee-Kelley et al., 2003). Further, Fjermestad and Romano Jr (2003) assert that E-CRM carries the objectives to improve customer service, retain valuable customers as well as aid in analytical capabilities. According to Winer (2001), any contact or touch points between customer and service encounter may influence customer relationships. Thus, in this Internet age, Internet technology plays an important role in improving service levels by providing new forms of service delivery, strengthening customer intimacy, responding more rapidly to customers' needs and affording customers the opportunity to have greater control over product/service offered.

E-CRM enhances satisfaction and loyalty

Internet-based services continue to grow in importance in the business-to-consumer environment. From a consumers' perspective, Internet based services significantly reduce the costs for searching, provide wider selection of vendors, lower priced products/services, greater control over product/service offerings and convenience (Anderson & Srinivasan, 2003). For firms, the Internet channel's increased importance can be seen from its contribution towards disseminating information (Cho & Park, 2001), enhanced consumer value (Yang & Peterson, 2004), improved consumer satisfaction (Anderson & Srinivasan, 2003) and greater influence in retaining consumers, which in turn leads to better profitability (Reichheld & Scheffer, 2000) and expanded market share.

Primarily, in view of intense competition an understanding of what constitutes consumer satisfaction and loyalty is imperative in an online environment. That is, the extent to which a service improves consumer satisfaction may play a great role in influencing his/her intention to return. In order to understand the roles of the Internet in enhancing customer relationships, the links between CRM attributes delivered on the internet (E-CRM) and consumer overall satisfaction and loyalty merit further investigation. Other researchers have approached this issue by examining company usage of the Internet in customer services and online communities (Poon & Swatman 1999), investigating the link between E-CRM implementation on e-tailing sites and consumer satisfaction (Lee-Kelley et al., 2003), and E-CRM attributes and their effect on consumer loyalty (Feinberg & Kadam, 2002). Nevertheless, the cause-effect links between E-CRM attributes, overall satisfaction and loyalty are critical in making decisions about how resources should be invested in building long-term consumer relationships.

HYPOTHESES AND MODEL DEVELOPMENT

Dimensions of E-CRM

Previous studies in marketing and information systems have investigated the factors affecting buyer-seller relationship on the internet. These studies suggest numerous marketing activities, which implementing these activities in an E-CRM program would assist in relationship building. For example, Koufaris et al. (2002) assert that *quality of information* increases the likelihood of consumers maintaining the relationship with a provider. Certainly, up-to-date, accurate and comprehensive yet relevant information appeals more to consumers and may be a source of differentiation. Hence, ensuring information quality on one's site is vital in an E-CRM implementation.

Another important measure of an effective E-CRM program is the site's *ease of navigation*. The quality of a user interface and navigation speed may reduce consumers' efforts to fulfil their needs. Indeed, if consumers find a web site too hard to navigate or is too time-consuming to get what they need, they may simply abort so as not to waste time (Luo & Seyedian, 2004).

In addition, the *quality of customer service* plays a significant role in building relationships (Vatanasombut et al., 2004). Consumers are concerned with their orders, payment and refund policies and may require help with products they purchased. Therefore, a firm's E-CRM program should emphasize on efficient inquiries handling and customer service representative's sufficient knowledge of products/services and customer accounts.

Ensuring consumers have a positive experience in ordering and purchasing processes is critical in building long-term relationships. Consumers expect the right products to be delivered to them at the right time (Yang & Peterson, 2004). Thus, effective *fulfilment of orders* is imperative in an E-CRM implementation as it may indicate that a firm is reliable.

Next, *integration between the traditional marketing and online channel* marketing determines the success of any relationship marketing strategy on the Internet (Vatanasombut et al., 2004). That is, customers want to deal with single entity businesses regardless of the channels and hence the same quality of service. Certainly, the synchronized channels enhance consumer convenience and hence play an important role in building relationship. Forming an *online community* of consumers has its strategic imperative an E-CRM effort. Consumers who find their "own community" on a site for an exchange of information with their online friends tend to bind themselves with the company brand. This sense of belonging can provide a firm the opportunity to create a personal relationship with consumers (Winer, 2001).

A *reward* is another important factor in an E-CRM program. On the Internet, rewards are offered in the form of free gifts, rebates or point redemptions in return for repeat purchases or visits. By giving rewards, a firm may increase customer switching cost leading to long-term relationships (Geissler, 2001).

In addition, the Internet's capacity to create customer profiles makes it possible for firms to provide *personalized* services. This unique feature of the Internet permits one-to-one marketing promotes the sense of consumer control over product/service, which intensifies the likelihood of building enduring relationships (Luo & Seyedian, 2004).

Trust is another important determinant of customer relationship. Perceived risks associated with Internet transactions, for example perceived security leads to trust playing a greater role in relationship building.

Next, researchers suggest that *perceived value* is a salient factor in establishing and maintaining relationships (Yang & Peterson, 2004). For example, consumers can track their order status in real time, retrieve a list of activities conducted in the past and receive personalized recommendation on products/services. Perceived value obtained from a firm's web site enhances consumers experience, thus plays a vital role in consumers decision to build a long-term relationship with service providers.

Finally, *emotional benefit* is said to have a role to play in customer relationships. For example, customers who are greeted by their first names may feel appreciated. This emotional attachment increases consumer sense of belonging leading to establishing long-term relationships (Yu & Dean, 2001). As a consequence, we propose the first hypothesis:

H1: The level of E-CRM implementation is a determinant of information quality, ease of navigation, customer service quality, order fulfilment, integration of marketing channels, online community, reward program, personalization level, trust, perceived value and emotional benefit.

Our first hypothesized relationship proposes that the effectiveness of an E-CRM program is accountable for the extent to which the 11 variables (above) would be implemented. Therefore, a second-factor model was employed (see Figure 1).

Relationship between E-CRM and overall satisfaction

E-CRM is premised on the economics of consumer retention and the way to retain consumers is to improve service quality and satisfaction (Berry & Parasuraman, 1991; Zeithaml & Bitner, 1996). Storbacka et al, (1994) claim that consumer satisfaction is no surrogate for establishing relationships and go on to question the premise that service quality leads to satisfaction and, in turn, that satisfaction leads to improved relationships. Rather, they suggest that consumer relationships are influenced by other relationship factors, which include patronage behaviour and loyalty (Oliver, 1997), which in turn is affected by the mediating factor of satisfaction.

Although researchers have debated the direct relationship between CRM and consumer satisfaction, some claimed that CRM and E-CRM influence overall satisfaction. For example, a study on E-CRM attributes and consumer satisfaction found that mailing list, quick order ability, gift certificates, affinity program and account information influence consumer satisfaction with e-tailers site (Feinberg & Kadam, 2002). Taylor and Hunter (2002) reported that E-CRM service quality influences customer satisfaction in a business-to-business customer relationship. Other elements of E-CRM such as quality information, ease of use, order fulfilment, perceived security are also found to affect overall satisfaction. This leads to the second hypothesis:

H2: The use of internet in building customer relationships will influence satisfaction.

Relationship between E-CRM, satisfaction and loyalty

Some researchers argue that loyalty refers to an attitudinal response toward a product brand or service (Czepiel & Gilmore, 1987); that is, consumers have the desire to continue patronizing a site when they are satisfied with their service encounters. These feelings of commitment will lead to actual repurchase behaviour. That is, attitudinal loyalty will induce loyalty behaviours (Sharp et al., 1997). In a technology-mediated relationship, loyalty is said to be a more important consideration than price (Reichheld & Schefter, 2000). Developing relationships with loyal consumers is more profitable since they often will bring in substantial revenues, demand less time and attention, are less sensitive to price and may spread positive messages via word-of-mouth (Anderson & Mittal, 2000). In fact, a study conducted in UK on consumers of entertainment-related product e-tailers revealed that the E-CRM features of these sites enhance loyalty and reduce price sensitivity (Lee-Kelley et al., 2003). Indeed, these points sharply etch the need to better understand the E-CRM features and dimensions that are more likely to increase overall satisfaction, create loyalty and result in more efficient and effective management of long term relationships (Feinberg & Kadam, 2002). Thus, this model shows the three variables with arrows pointing from E-CRM-satisfaction-loyalty as shown in Figure 1. Given the likely influence of E-CRM on overall satisfaction and loyalty, we propose Hypothesis 3.

H3: The use of internet in building customer relationships will influence satisfaction, which in turn will lead to loyalty.

Our causal diagram is presented in Figure 1.

RESEARCH METHOD

Survey Instrument Development

Because previous research has not clearly articulated the construct of E-CRM, e-satisfaction and e-loyalty, our study yielded scale items of the three research variables through a content analysis. In addition to existing literature, the content analysis was conducted by interviewing 15 industry experts, whom were marketing and e-commerce executives of respective internet-based companies in the Klang Valley area. They represented companies which have been doing business on the Internet for more than 3 years. Their opinions and experience on the Internet capabilities as a relationship marketing tool and consumer responses toward Internet marketing programs were sought.

After sorting and regrouping their responses, the content analysis identified 12 dimensions of E-CRM, 6 indicators of overall satisfaction and 5 indicators of overall loyalty. In addition, 3 academic experts in relationship marketing

were asked to assess the content validity of the measurement scales.

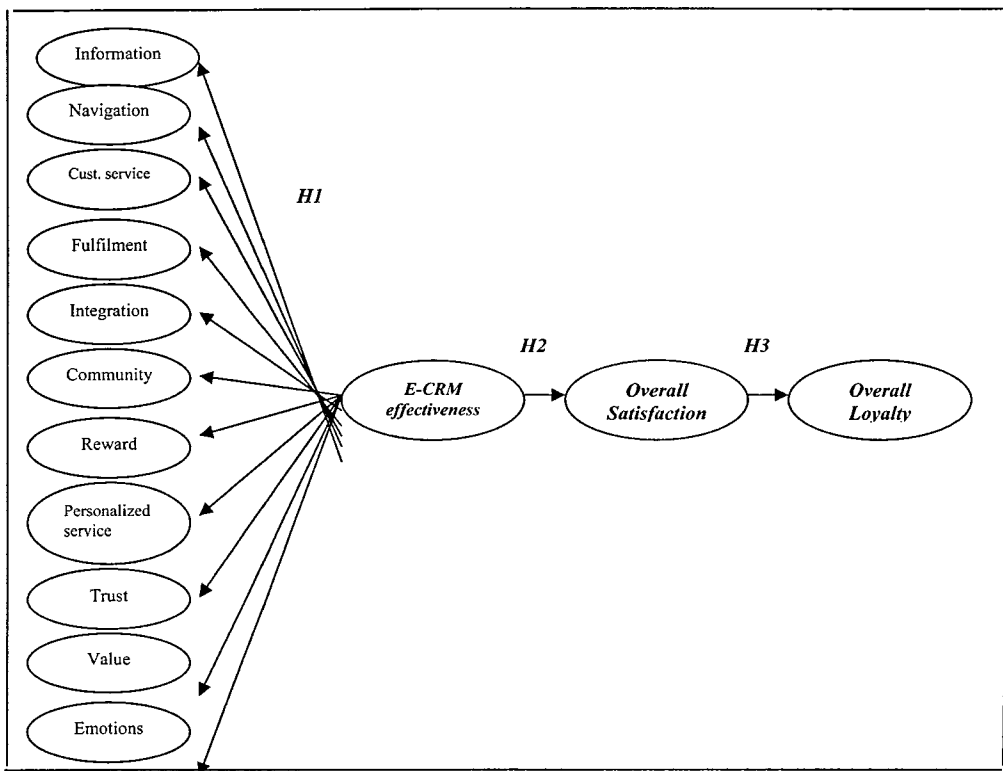


Figure 1: Hypothesized relationships.

QUESTIONNAIRE DESIGN

All constructs were measured on 5-point likert scales, ranging from 1 = strongly disagree to 5 = strongly agree. The Appendix provides a full description of the measures used. The questionnaire was consisted of three parts. The first part, Section A was consisted of demographic information such as a respondent’s age group and income level. Section B was consisted of general information about a respondent’s Internet activities. These questions included respondent’s access location, number of years using the Internet, types of Internet activities and time spent in a week on the Internet. The third part, Section C, was designed to assess the attributes affecting respondent’s relationship decision, satisfaction and loyalty on the Internet respectively. In answering the questions, respondents were asked to draw upon their past experiences with their favorite web sites, which they continue to repatronize.

Data Collection

The target population for this study was defined as individuals who owned individual email accounts because they represented most of the Internet users in Malaysia (Sharif, 2004). The main source of the individual users’ list came from various education, government and corporate institutions. Due to the nature of work that people do in these institutions, which requires the use of the Internet, most users can be found in these institutions in Malaysia. Letters seeking permission to access the institution’s list of users’ database were sent out to 15 universities and colleges, 10 government and 50 corporate institutions. For reasons of confidentiality, neither the names of individuals nor the organizations they work for were included in the questions. All the education institutions, 8 government and 45 corporate institutions were willing to cooperate and allowed us access to their directory of users (individuals with email accounts). The rest did not respond to our letters or turned down our request.

From a list of 300,000 email account owners and contact details which was obtained from participating institutions’

web sites, 1000 respondents were systematically selected: every 300th of individual from the list was selected until the required sample size was reached. A personally (face-to-face) administered survey was employed in this study so as to obtain a higher response rate (since the questionnaires were collected immediately once they were completed) (Malhotra, 1999).

ANALYSIS AND RESULTS

A total of 626 (62.6%) responses were collected, however due to invalid and missing responses only 547 (54.7%) were usable for analysis. Respondents were almost evenly split by gender (50.1% were male and 49.9% female). Most of the respondents were 21 to 30 years of age (51.4%), followed by the age groups of 31 to 40 and below 20 years at 28.5% and 10.2%, respectively. 48.6% of the respondents had spent at least 15 years in education. Most of the respondents were executives (47.5%) and more than half (51.0%) of them earn between USD3200 to USD9500 (RM12,000 to RM36, 000) per annum. As to the Internet usage profile, majority of the respondents spent less than 30 hours per week (56.9%) while 26.9% of the respondents spent more than 40 hours per week on the Internet. Most of the respondents were experienced users who have been using the internet for more than 5 years (55.4%).

Measurement Validation

Prior to measurement model and structural model tests, variables were tested for patterns of correlations between variables (Tabachnick & Fidell, 2001). The Pearson correlation results indicate that all the linear relationships were in the expected direction, that is, they were significantly correlated. To evaluate construct validity, we followed the steps suggested by Anderson and Gerbing (1988). A two-step approach was employed. First, an exploratory factor analysis was conducted to assess the underlying factor structure of the scaled items. However, in order to test models that closely resemble the hypothesized construct relationship as well as the linkages between constructs (Long, 1983) a confirmatory factor analysis was performed. Thus, the reliability of research variables scale was examined by specifying a single factor model in a confirmatory factor analysis (CFA) using AMOS 4.0 (Arbuckle, 1999). Furthermore, several fit indices were obtained to determine how well the model explains the sample data.

When tested using CFA, items that produced rather low factor loadings, below 0.3 (Hair et al., 1998) were omitted. In this instance, items S4, N6 and C7 were omitted. All the model fit indices: the goodness-of-fit index (GFI) and comparative-fit index (CFI) were greater than the recommended value; and the root-mean-square error of approximation (RMSEA) for each model was less than 0.08 (Baumgartner & Homburg 1996; Hair et al., 1998), thus suggesting that the model fits the data reasonably well.

Convergent validity is indicated when the items of the same construct load highly on each other and not on other constructs (Bollen, 1989). Item loadings more than 0.3 (Hair et al., 1998) showed that the scale demonstrates convergent validity. To evaluate discriminant validity we tested the constructs paired against each other. Discriminant validity is evident when the correlations are not equal to 1.0 (Bollen, 1989). Appendix 1 summarizes the results of this test.

Dimensions of E-CRM

The first hypothesis posits that the effectiveness of E-CRM implementation explains the quality level of information, ease of navigation, customer service, fulfillment, integration of marketing channels, online community, reward program, personalization level, trust, perceived value and emotional benefit. The goodness-of-fit statistics: $\chi^2/df = 2.32$; GFI= 0.87; CFI= 0.95; RMSEA= 0.05 were all above the recommended value thus indicating that the model is reasonably consistent with the data.

As expected all factors favorably link to E-CRM except for emotional benefit (low loading = 0.24) indicating that not all interactive features of the Internet significantly contribute toward building relationship with consumers. Hence, H1 can be partially supported. The results presented in Appendix 2 show the loadings and reliability measures of the items scale to their respective constructs.

E-CRM, satisfaction and loyalty

One of the objectives of this study is to examine the relationship between the implementation of E-CRM features and overall satisfaction and loyalty. Firstly, the fit indices: chi-square value per degree of freedom (2.45), CFI (0.94), NFI (0.91), GFI (0.840), RMSEA (0.05) indicated that the model achieved a satisfactory level of goodness of

fit in predicting the variance of customer loyalty (51%) and customer satisfaction (76%). These indicators clearly show that the model fit the data reasonably well.

Next, the path coefficients indicated that E-CRM features and overall satisfaction are two powerful predictors of customer loyalty. As expected, E-CRM features favorably influence consumer assessment of overall satisfaction ($\beta = 0.87, t = 41.52$). That is to say, the more E-CRM features employed the higher consumer satisfaction level may be. Our finding parallels the results in Feinberg and Kadam (2002) study. Thus, H2 is supported.

Further, the effect of overall satisfaction was also significant. Consumer satisfaction has a direct positive impact on loyalty ($\beta = 0.71, t = 23.73$) and this is consistent with previous studies and arguments (Van Riel et al., 2002; Yang & Peterson, 2004). Therefore, H3 is verified. The causal diagram for the model for our confirmation assessment with path loadings, t-statistics, r^2 and fit indices are found in Figure 2.

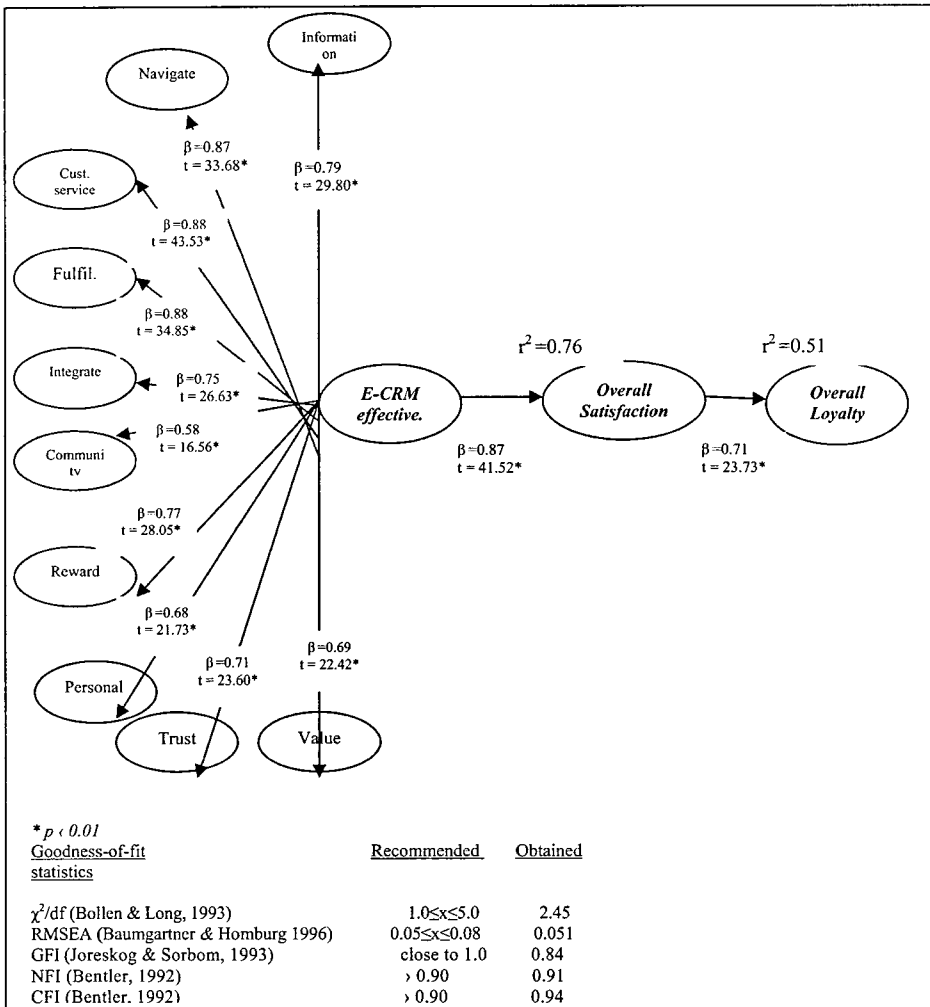


Figure 2: Hypothesized relationships.

DISCUSSION

Since it is more cost effective to serve loyal customers, building trusting relationships seems imperative for business profitability. To remain competitive in the relationship age, firms should comprehend the factors that are pertinent

in relationship building. This study identifies these factors, which their adoption in firms online marketing strategy may lead to a strategic advantage for a long-term business. The *quality of customer support* ($r^2=0.83$) and *delivery of orders* ($r^2=0.70$) are vital and are the most important features firms should invest in. It is expected that customer service representatives are “well-informed” about each consumers’ activities should there be any inquiry or problems in relation to a transaction. Simultaneously, one mistake firms should avoid is to upset consumers with poor handling of orders since this may cause consumers to lose confidence in the provider, hence the provider’s reputation and credibility may be undermined by consumers. In such cases, customer service efficiency is critical in solving consumers’ complaints.

Next, *web site navigational issue* ($r^2=0.69$) and *accurate information* ($r^2=0.68$) are two other important factors firms should look into. Naturally web sites should serve the purpose of providing easy links to updated information. Therefore, simple site design would suffice so long as the links are clearly displayed and the required information is easily accessible. Next, in building relationships, consumer lock-in is imperative tends in helping firms to remain competitive. Interestingly, our results indicated that attractive *rewards* ($r^2=0.65$) are one of the important elements in building long-term relationships.

A possible explanation for this is consumers in the electronic marketplace place higher expectations on service. Their evaluation of superior service extends beyond the quality of material directly involved in the production or delivery of service. Rather, elements which are merely enticing or entertaining, such as gifts and redemption point, make a difference in consumers’ assessment of service performance.

Integration of marketing channels ($r^2=0.60$) plays a significant role in managing consumer relationships. Indeed, the flexibility and convenience resulting from one-channel-serves-all (for example, one may check product availability in a nearby store from the Internet channel) increases the propensity to return. Gaining consumer *trust* ($r^2=0.58$) is another lock-in factor which should be considered. Companies should be aware that consumers seek reliable security measures which leave consumers almost worry-free whenever they decide to give their financial information on the site. As well, an assurance of delivery of promises is of equal importance before a consumer places his/her trust in a service provider. Hence, high security standards and practices as well as reliable services, are vital influences on consumer repeat behavior. In addition, *personalized services* ($r^2=0.55$) and *flexibility* ($r^2=0.54$) are two other factors that assist in enhancing consumer relationships.

E-CRM, satisfaction and loyalty relationships

Feinberg and Kadam (2002), Lee Kelley et al. (2003), and Taylor and Hunter (2002) have uncovered the needed understanding about the relationships between the presence of E-CRM features on web sites and improving consumer satisfaction and loyalty. The suggestion of E-CRM features leading to improved customer satisfaction and loyalty reported by Feinberg and Kadam (2002), Lee Kelley et al. (2003), and Taylor and Hunter (2002) finds support in this research. Further, this study confirms what has been discovered by Taylor and Hunter (2002) in a business-to-business context concerning the e-satisfaction moderating role on e-loyalty in E-CRM. Therefore this study provides empirical evidence of online satisfaction-loyalty linkage in an E-CRM business-to-consumer environment.

In addition, our study reveals that the effective use of E-CRM has a bearing on consumer satisfaction levels, which in turn is an antecedent of consumer loyalty. Although it is difficult to distinguish e-tailers sites in terms of their “physical” appearance and list of product/services, a firms’ “real” performance is assessed on its reliability, efficiency, and flexibility. Upon which, consumers shall evaluate firm’s performance against their own expectations: either below, within or beyond consumers’ expectations. Therefore ensuring excellent service encounters at the forefront of customer interactions – the web site, is critical.

Most importantly, firms are encouraged to continuously monitor consumers’ satisfaction levels due to the fact that the implementation of E-CRM, leading to loyalty, is through satisfaction. Consumers who have pleasant encounters with a site tend to build trust and are committed to the site, thus are more likely to repatronize. Likewise, those who are not satisfied will not hesitate to switch. The Internet market is borderless, where consumers have an abundance of e-tailers to choose from at a mouse-click. Therefore, it is more critical now than ever for firms to improve and increase consumer satisfaction in order to retain an edge and influence these consumers’ intention to return. Some suggest that consumers are loyal to a provider when the learning curve is high and switching is costly (Anderson & Srinivasan, 2003). However, this study is concerned with the business-to-consumer marketplace where switching to another e-tailer may incur with little cost. That is, today’s web sites are designed to be more graphical and easy to navigate, hence new users may not find browsing a site as difficult causing them to switch effortlessly.

Future directions for research

This study is subject to several limitations. Firstly, our study sample came from Internet users in the business-to-consumers context. The results are limited to e-tailing environment and may not be applicable to business-to-business relationships. In this survey the perceptions of consumers toward e-commerce in general were assessed. More in depth studies could be carried out to investigate consumers' perception on the use of E-CRM in industry specific environments - such as the financial sector, and the entertainment, health, government, and education sectors. E-CRM may have different consequences for product-based, versus service-based, industries. In this survey, respondents were asked to fill out a paper-based survey and try to recollect their past experiences on the features that influence their repeat visits behaviours. This study could be improve if a web-based survey was conducted to concurrently assess respondents reactions to a particular site features while they interact with the site . This research could be applied more widely to verify to what extent the results can be transposed to other regions of the world. Potential areas of study are whether other factors of E-CRM which influence the assessment of satisfaction and loyalty can be identified in regions where consumers' behavior may differ depending on culture, beliefs and technology acceptance level.

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APPENDICES

Construct	INF	NVG	CUS	FUL	PES	REW	INT	COM	TUS	VAL
INF	1.00	0.04	0.34	0.10	0.24	0.24	0.14	0.18	0.02	0.02
PRD	0.08	0.16	0.14	0.08	0.06	0.06	0.09	0.04	0.06	0.07
NVG	0.04	1.00	0.01	0.07	0.01	0.21	0.18	0.04	0.03	0.01
CUS	0.34	0.01	1.00	0.18	0.59	0.16	0.29	0.05	0.03	0.06
FUL	0.10	0.07	0.18	1.00	0.45	0.06	0.02	0.07	0.11	0.10
PES	0.24	0.01	0.59	0.45	1.00	0.21	0.11	0.15	0.07	0.12
REW	0.24	0.21	0.16	0.06	0.21	1.00	0.56	0.30	0.01	0.02
INT	0.14	0.18	0.29	0.02	0.11	0.56	1.00	0.19	0.02	0.03
COM	0.18	0.04	0.05	0.07	0.15	0.30	0.19	1.00	0.04	0.01
TUS	0.02	0.03	0.03	0.11	0.07	0.01	0.02	0.04	1.00	0.20
VAL	0.02	0.01	0.06	0.10	0.12	0.02	0.03	0.01	0.20	1.00

Appendix 1: Discriminant validity assessment for the paired constructs.

Constructs/ Scale items	Loading	α
Overall satisfaction (SAT)		0.89
S1 The information is always updated	0.72	
S2 Prices of products/services are always lower compared to other companies	0.71	
S3 All links on the web site are in proper working condition	0.85	
S4 A wide range of products/services to choose from	0.25*	
S5 Customer service responds to any enquiry quickly	0.83	
S6 Products delivered are the right items as per order	0.84	
S7 All private information about customers are safeguarded from any unauthorized Access	0.82	
Overall loyalty (LOY)		0.80
L1 The company knows my preferences very well	0.76	
L2 The company's performance exceeds my expectation	0.68	
L3 I feel highly appreciated	0.52	
L4 Always deliver its promises	0.76	
L5 All transactions data is well protected from hacking, hence it is safe	0.73	
Information quality (INF)		0.88
I1 The information is accurate	0.87	
I2 In-depth information on products/services	0.83	
I3 Information displayed is easy to understand	0.85	
Ease of navigation (NVG)		0.90
N1 The website is always accessible	0.84	
N2 The web site provide easy steps whenever a customer needs to register	0.89	
N3 Only a few clicks to get information	0.86	
N4 The web pages load quickly	0.90	
N5 The links to information are clearly displayed	0.82	
N6 The web site uses a language that can be easily understood	0.15*	
Customer service quality (CUS)		0.93
C1 Customer service are efficient in handling complaints	0.92	
C2 Customer service is friendly in answering customers enquiry	0.71	

C3 Customer service always notify me of my order (subscription) status	0.89	
C4 Customer service always respond within 48 hours	0.70	
C5 Customer service can be contacted through variuos channels	0.79	
C6 Customer service appears to have wide knowledge of products/services	0.85	
C7 Customer service always keep updated with users transactions record	0.21*	
C8 Customer service are always fast in resolving customers complaints	0.72	
Oredr fulfilment (FUL)		0.89
F1 Products received are always in good condition	0.87	
F2 Products/services are delivered within the delivery time as promised	0.92	
Personalization (PES)		0.64
Z1 The provider keeps a database of my transactions with them	0.69	
Z2 I receive online advertisements that match my interests	0.72	
Z3 The web site allows users to create "My Account" that will keep all past transactions details	0.60	
Reward (REW)		0.90
R1 I will receive rewards for returning	0.90	
R2 The web site offers attractive cash rebates for any purchase (subscription)	0.89	
R3 The web site offers attractive points redemption for any purchase (subscription)	0.83	
Integration (INT)		0.89
T1 I can pick-up the products I ordered via the web at a nearest physical store	0.69	
T2 I can check orders placed on the Internet through the physical and vice-versa	0.94	
T3 I can exchange or return products bought from the web in a physical store	0.96	
Online community (COM)		0.90
Y1 I can share/exchange information with my buddies in an online forum	0.92	
Y2 I can trade goods with my "friends" found on the same channel/site.	0.88	
Y3 I can obtain useful information about a company from the online members	0.91	
Trust (TUS)		0.89
U1 Impose a strict privacy policy	0.90	
U2 Provide third party verification (eg. seal of approval) to verify web site's authenticity	0.84	
U2 The customer service is reliable	0.84	
Perceived value (VAL)		0.92
V1 The company allows access to track my orders	0.64	
V2 I can make changes to my orders without much hassle	0.88	
V3 Provide my account profile which I can use for my own further analysis	0.74	
V4 I can request for products/services based on my specifications	0.70	
V5 The company understands my needs	0.89	
V6 The company keeps track of my transaction	0.87	

* low loading items (<0.3) were omitted

Appendix 2: CFA results of measures.