

The Effect of e-CRM on Customer Satisfaction: An Empirical Study of Online Shopping

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ABSTRACT: One of the key developments in marketing has been the advent of electronic customer relationship management (e-CRM) systems, designed primarily to create and manage long lasting customer relationships. To remain competitive in this internet based environment it is imperative to attract new customers and increase customer's retention and to achieve these objectives it is crucial to implement e-CRM. The study was aimed to identify the effect of e-CRM strategies on customer satisfaction in context of online shopping. This study is based on 150 respondents and analysis confirms the conceptual model that convenience, trust and security have significant effect on customer satisfaction. This study enables managers and marketers to implement the e-CRM in the best shape and match it with current needs and requirements of consumers. The conclusions suggest that if organizations want to get the most from their e-CRM implementations they need to revisit the general principles of usability and resistance which should be applied thoroughly and consistently.

Keywords: Customer Relationship Management (CRM); Electronic Customer Relationship Management (e-CRM); e-Commerce; Customer satisfaction

1. INTRODUCTION

In the last decade, CRM has become a popular marketing Strategy, effectively managing customer relationships and boosting companies' profitability (Bolton et al., 2004). Identifying, satisfying and retaining company's best customers and maximizing the value from them is the underlying objective of CRM (Kennedy, 2006). Companies know the fact that the only mantra for survival these days is to reach the right customer at the right time with a right offer through the right channel. To attain a competitive edge in the market, it is evident to implement CRM strategies that enables better customer service, allows better management of customer expectations, increased profitability and improves customer loyalty (Cho et al., 2001; Reichheld, 1996; Romano and Fjermested, 2001; Winer, 2001; Grover, 2011). Similarly, retaining existing customers is cheaper than acquiring new customers. It costs five times as much to acquire a new customer than to retain an existing one (Peppers and Rogers 1996).

In this era of globalization and fast changing economic environment, many organizations redesigned their CRM to satisfy customer needs and create mutual and beneficial relationships. Rapidly growing electronic business and Internet-based services has created a new platform to deliver CRM functions on the Web, which is popularly known as e-CRM (Alhaiou et al., 2009). e-CRM helps a company in different situations including repeat purchase, word of mouth, retention, cross buying; brand loyalty and customer satisfaction, managing effective and efficient relationships with customers which lead in gaining competitive advantage for the firms (Karimi and Sarkhosh, 2006).

In this study, we investigate the influence of e-CRM on customer satisfaction, as satisfaction is significantly related to changing customer's attitude and their intention to purchase. With these insights, marketers can make more informed decisions which will hopefully increase their profitability and spawn continuous growth in their business in the highly competitive market. The discussion also acknowledges the formidable challenges which e-CRM adoption and implementation pose for companies in the areas of customer relationships, managing on-line channels, building trust and security among online buyers.

The remainder of this article is structured as follows. In the next section we present a brief review of literature, followed by a discussion of our conceptual framework and hypothesis. We then describe the research method. Finally, we round off by discussing results and implications for research and practice.

2. LITERATURE REVIEW

2.1 Electronic Customer Relationship Management (e-CRM)

e-CRM is the latest technique companies are using to increase and enhance their marketing skills and capabilities (Alhaiou et al., 2009). It is mixture of software, hardware, application and management commitment (Dyche, 2001), which is concerned with attracting and keeping economically valuable customers and eliminating less profitable ones (Romano and Fjermestad, 2001), building loyalty and profitability, increased customer satisfaction, simplified processes and lower costs, better insight and decision making of the organization (Reichheld, 1996; Winer, 2001). With the growing global penetration of the Internet, e-CRM has become increasingly popular as a Communication tool and used as a relationship-building platform (Lam et al., 2013). It enables companies to implement interactive, personalized and relevant communication with customers through electronic and traditional channels (Milovic, 2012).

In this highly competitive environment, e-CRM is critical for the success of businesses in India. By utilizing big data, companies can understand customers' needs, wants and satisfy customers by developing customer-centric marketing programs that help in creating value for customers, providing

personalized products and services (Sheth et al., 2000). Internet and email as a part of electronic and interactive media are playing significant role in operationalizing CRM and support effective customized information between the organization and customers (Kennedy, 2006). Whereas, Rosenbaum and Huang (2002) argue that the main driver behind e-CRM adoption is commonly shared belief that improves customer loyalty and retention through the enhancement of customer satisfaction.

e-CRM has become a requirement for survival these days, not just a competitive advantage but allows customers to access company from more and more places, since the internet access points are increasing day by day (Pavithira, 2010). Using technology to optimize interactions with customers companies can create a 360-degree view of customers to learn from past interactions to optimize future ones (Chen and Popovich, 2003).

2.2 Customer Satisfaction

The concept of customer satisfaction occupies a central position in marketing thought and practice (Churchill and Surprenant, 1982). Satisfaction is important from consumer's point of view because it reflects a positive outcome from the outlay of scarce resources and the fulfillment of unmet needs (Bearden and Teel, 1983). From the perspective of antecedents and consequences of satisfaction, Oliver (1980) proposed a model that expresses consumer satisfaction as a function of expectation and expectancy disconfirmation. Moreover, satisfaction significantly affected customer's attitude and their intention to purchase. Hence, the researchers have focused on discussions of the determinants of customer satisfaction. Satisfaction among online buyers is likely to change depending on different adoption stages, i.e., pre-adoption and post adoption. (Alhaiou et al. 2006). For e-CRM, these adoption stages correspond to the customer lifecycle phases of attraction and retention. Several studies analyse the impact of e-CRM on customer satisfaction. Online shopping behaviour is positively related with e-CRM (Karami et al. 2013). Dimitriades (2006) found that if transactions are made more convenient, useful and less expensive for the customer, it is likely that it will give service provider repeat business.

3. CONCEPTUAL FRAMEWORK

Based on the existing literature regarding effects of e-CRM on customer satisfaction, a conceptual framework is constructed to illustrate the factors that affect customer's satisfaction toward online shopping. Review of existing literature helps us in identifying theoretical models used in other studies and significant factors that influence customer satisfaction levels. In this section we develop our hypothesis and conceptual model based on previous discussion. Rather than testing all the variables, we identify those variables which are very important and have significant effect on

customer's satisfaction. For our research purpose we find convenience, personalized offers, security and trust as value creation factors affecting customer satisfaction regarding online shopping (see Figure 1). The following sub-sections present the literature on the factors influencing customer's satisfaction.

3.1 Convenience

Convenience refers to the extent to which a customer feels that the web site is simple, intuitive, and user friendly. Accessibility of information and simplicity of the transaction processes are important antecedents to the successful completion of transactions. Eastin (2002) studied four e-commerce activities (online shopping, banking, investing, and e-payment systems) and found that prior to adoption, perceived convenience and financial benefits predict adoption decision. Short response time, facilitates fast completion of a transaction, and minimizes customer effort are some important characteristics of a convenient website (Schaffer, 2000). Based upon the relationship between convenience and customer satisfaction toward online shopping, the following hypothesis can be stated for this study

H1: There exists a positive relationship between convenience regarding online shopping and customer's satisfaction

3.2 Personalized Offers

To extend the breadth and depth of purchases, e-retailers provide relevant information and incentives to their customers. Various kinds of promotional offer are used by the e-retailers which include; discounts, cash backs, bonus points, etc. Based on the literature it can be stated that offers committed by retailers will have an impact on consumers satisfaction

H2: There is a significant relationship between personalized offers and consumers satisfaction toward online shopping.

3.3 Security

Security is a set of procedures and programs to verify the information source and guarantee the integrity and privacy of the information (Tsiakis and Sthephanides, 2005). Sathye (1999) finds that security is a significant obstacle to online banking usage, which affects the use of e-payment systems. Similarly, in online shopping customers hesitated while purchasing due to security issues. Therefore, we conclude that secure and safe transaction provided by retailers significantly affects customer's satisfaction.

H3: There is a significant relationship between security and consumers satisfaction toward online shopping.

3.4 Trust

Trust is defined as a function of the degree of risk involved in financial transactions, and the outcome of trust is reduced perceived risk, leading to positive intentions toward e-payment adoption (Yousafzai et al., 2003). Prior studies found trust to be a significant determinant influencing customers' willingness to conduct e-commerce transactions and engage in online exchanges of money (Gefen, 2000; Hoffman et al., 1999). Customers' trust in an internet environment is very important as there is little guarantee that the online vendor will refrain from undesirable, unethical, and opportunistic behaviour such as unfair pricing, presenting inaccurate information, distributing personal data, and purchase activity without prior permission (Gefen, 2000). On the basis of above arguments we propose that trust in e-retailer is positively related to customer's satisfaction

H4: There is a significant relationship between trust and consumers satisfaction toward online shopping.

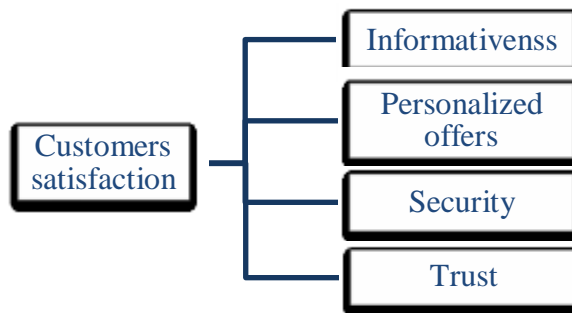


Figure 1: Conceptual Framework

4. RESEARCH METHODOLOGY

4.1 Sampling Method and Respondents' Demographic Information

From the discussions of literatures above, we find that few researches have described and verified the relationships between e-CRM and customer satisfaction in relation to online shopping. In order to collect the information, the study targeted 170 respondents based on convenient sampling technique. To ensure accurate findings, 20 invalid responses were eliminated and therefore 150 valid responses were analyzed with the help of Statistical Package for Social Sciences (SPSS) Version 17. Table 1 shows the demographic profile of the respondents. Gender composition is almost equal. Whereas, age groups are somewhat spread, with the majority of respondents are from 21 to 30 age group. About 40 % respondents possess doctorate or professional qualification.

Table1. Demographic profile of respondents (n=150)

Characteristics	Descriptor	Distribution	Percentage
Age	Less than 20 years	26	17.3
	21 to 30 years	66	44
	31 to 40 years	34	22.7
	41 years or older	24	16.0
Gender	Male	80	53.3
	Female	70	46.7
Education	Undergraduate or lower	42	28.0
	Postgraduate	48	32.0
	Doctorate, Professional	60	40.0
Occupation	Student	36	24.0
	Employed	52	34.7
	Unemployed	62	41.3

4.2 Survey Instrument

The survey was carried out by using a self-administered questionnaire which is divided into two major parts. The first part focused on e-CRM factors (convenience, personalized offers, security and trust). Most of the questions were on Five-point likert scale ranging from “Strongly Disagree” (1) to “Strongly agree” (5) for measuring independent variables to dependent variable (Customer Satisfaction). The second part collected the respondent’s demographic data, such as age, gender, education and occupation. Respondents in the survey include the customers that are using online retail websites to collect information and purchasing goods and services.

Descriptive analysis was used to present the demographic profile of the respondents. Correlation analysis was used to measure the correlation between the variables. To predict the value of one variable on another variable, multiple regression was used.

5. RESULTS AND DISCUSSION

In order to test the hypotheses, Pearson’s correlation analysis was utilised. Pearson’s product moment coefficient (r) is a parametric technique that portrays the strength of the relationships between two variables. The interpretation value lies between 0 and 1. According to Cohen’s (1988) guidelines, there exists a small correlation if the r value lies in between 0.10 to 0.29 or $r = -0.10$ to -0.29 ; medium correlation when $r = 0.30$ to 0.49 or $r = -0.30$ to -0.49 and large correlation when $r = 0.50$ to 1.0 or $r = -$

0:50 to -1:0. Results of the estimated model show that all three out of four independent variables significantly influence customer's satisfaction toward online shopping. The result implies that Convenience, trust and security positively affect the customer's satisfaction.

Table 2: Correlation Analysis

Independent variables	Overall satisfaction	Convenience	offers	security	Trust
Convenience	0.235**	1			
Offers	0.066	0.014	1		
Security	0.193*	0.385**	-0.107	1	
Trust	0.444*	0.160	0.282**	-0.158	1

**,* Correlation is significant at the 0.01 and 0.05 levels, respectively (two-tailed)

Hypothesis 1 contends that there is significant relationship between convenience and consumers satisfaction toward online shopping. The relation between convenience and customer satisfaction was tested. The results were analysed at a significance level of 0.01. Test revealed that there is positive correlation between convenience and consumer satisfaction regarding online shopping. However according to Cohen's model, $r=0.235^{**}$ belongs to the small correlation category, and hence one could argue that there is a small positive correlation between convenience and consumers satisfaction.

Hypothesis 2 proposes that there is significant relationship between personalized offers made by retailers and consumers satisfaction toward online shopping. The results reveal that $r=0.066$. In other words, the results proved there is no correlation between offers provided and customer satisfaction. Hence, we rejected the hypothesis.

Hypothesis 3 argues that there is significant relationship between security and consumers satisfaction toward online shopping. The results reveal $r=0.193^{*}$ significant at 0.05 level, which means that there is a small positive correlation between the security and customer satisfaction. Therefore one can conclude that safe and secure transactions will have an effect on consumer's satisfaction.

Hypothesis 4 hypothesize that there is significant relationship between trust and consumers satisfaction toward online shopping. The results showed $r=0.444^{**}$ which is significant at level of 0.01, which indicates a strong positive correlation between trust and consumer satisfaction. Therefore one can conclude that building trust between buyer and sellers enhance customer satisfaction regarding online shopping.

Table 3. Regression Analysis

Model	Unstandardized coefficients		Standardized coefficients	t	Significance
	β	SE	B		
(Constant)	1.138	0.536		2.122	.036
Convenience	0.081	0.097	0.66	0.836	.405
Offers	-0.052	0.084	-0.46	-0.622	.535
Security	0.166	0.055	0.239	3.018	.003
Trust	0.474	0.075	0.484	6.328	.000

Constant = Overall satisfaction, $R^2=0.254$, SE of the estimate=0.876

Table 3 shows the multiple regression analysis, which is used to identify Variables that affect dependent variable. Customer satisfaction was the dependent variable, and the independent variables were convenience, personalised offers, trust and security. The result form regression analysis showed that the model was significant with value of $R^2= 0.254$, which tells us that e-CRM can account for 25.4% variation in customers satisfaction.

6. CONCLUSION

Based on the experience of Internet growth in the recent years, the researchers see an explosion in online shopping and it has become a part of our life. Businesses and researchers as well can no longer afford to ignore it. The present research is one of a very few attempts to deal with the subject. This paper contributes to this area by identifying e-CRM effects on customer satisfaction and proposing four validated hypotheses. We discover that trust, security and convenience in online shopping significantly affect customer satisfaction. Since electronic commerce in India has operated for only about three to four years, it is still on the growing stage of product life cycle. It is difficult to conduct a sizeable scale of survey due to time and cost limitations. We hope that future research may be conducted in two areas. First, the researchers need to include all e-CRM factors that affect customer satisfaction. Second, researchers can also explore e-CRM effects on customer loyalty and customer retention on a larger scale and with a greater variety.

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