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Determinants of Electronic customer relationship management (e-CRM) for customer satisfaction in banking sector in India

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Internet-based companies need to remain competitive. One way of improving competitive advantage is to attract more customers and increase customer retention; for example, by developing long-term, safe relationships between the buyers and sellers. Little empirical research has been conducted on the link between customer relationship management and customer commitment within an internet, or e-commerce, context. Electronic customer relationship management (e-CRM) is a concern for many organizations especially banking sector (Scullin et al. 2002a; Scullin et al. 2002b), the purpose of this study is to gain a better understanding of the advantages e-CRM to customers and organization in banking sector. The study has found that the banks seem to have same description about the advantages of e-CRM. Our finding indicates that with the implementation of e-CRM and the latest technologies bank have ensured full security for the transactions of their customer’s e-CRM facilitates the organizations to provide one to one services and also maintain the transaction security of the customers.

Key words: Customer relationship management, customer, electronic customer relationship management (e-CRM), e-response.

INTRODUCTION

Changes are taking place drastically in the marketing environment during the last few years. Information technology has encouraged numerous new advances in the fields of marketing and business. Effects of information technology in the fields of marketing and management have highlighted the importance of re-arranging a new arrangement for marketing that gets benefited from web technology. But it was found that many companies have diverted their attention towards how organizations can maintain positive and long lasting relationship with customers. At the same time how to increase loyalty of customers. Thus, policies of organization have shifted towards customer-oriented strategies. Important factors like providing extra services, recognizing the requirements of the customers are termed as factors to choose the fate of companies (Wayland and Cole, 1997).

Today, numerous businesses such as banks, insurance companies, and other service providers understand the importance of customer relationship management (CRM) and its potential to help them obtain new customers retain existing ones and maximize their lifetime value. CRM is a sound business strategy to identify the bank’s most profitable customers and prospects, and devotes time and attention to expanding account relationships with those customers through individualized marketing, repricing, and customized service—all delivered through the various sales channels that the bank uses.

An important and valid advantage of web-based e-CRM is amount of information available to customers browsing. At the same time, this can be viewed as a weakness of web based e-CRM. The future of web based e-CRM is completely in the hands of one to one websites. Banking has been a pioneer in adopting e-CRM, but not so much.
empirical data is available on the benefit that it creates both for the banks and the customer and that is why it addresses the topic in the study.

As customer is central to all businesses and important that is why companies are customer oriented and it is an art of company providing his expectations, both benefits to customer and company areas are taken into consideration for this study. In e-CRM, online banking offers many benefits to banks as well as to customers. However, in universal terms the mass of private bankers are still not using online banking channel.

Newell (2000) stated that e-CRM systems use rich databanks of customer information to manage the relationship with customers. The paper expands on the basic research issue for markets on how best to integrate e-CRM to be both effective and efficient and deals with the role of customer relationship management in banking sector and the need for e-crm to increase customer value by analyzing the data obtains through various case studies of customer of Indian banks. The remainder of this paper is about CRM, e-CRM, benefits of e-CRM to customer, methodology (case studies), cross analysis, and conclusion.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Bose (2002) described the customer relationship management (CRM), fundamental and vital function of customer oriented marketing is to gather and accumulate related information about customers in order to provide effective services. CRM involves achievement analysis and use of customer’s knowledge in order to sell goods and services. Reasons for CRM coming into survival are the changes and developments in marketing environment and web technology. Relationship with customers is a newly distinguished as a key point to set competitive authority of an organization. Companies collect data related to their customers, in order to perform customer relationship management more effectively. In this increased heightened global competition arena, the new ways of working are firmly shifting into the hands of paying customers and organizations adapting from e-CRM to CRM.

ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT (e-CRM)

Dyche (2001) described that e-CRM is mixture of software, hardware, application and management commitment. e-CRM can be special types like operational and analytical. Operational e-CRM is given weight to customer touch up points, which can have contacts with customers through telephones or letters or e-mails. Therefore, customer touch up points is something web based e-mails, telephone, straight sales, fax, etc.

Analytical CRM is a group of data and is viewed as a continuous process. It necessitates technology to process customer’s data. The main purpose here would be to identify and understand customer’s demographics pattern of purchasing, etc in order to create new business opportunities giving importance to customers.

Vital and important key point is that e-CRM get into different forms, relying on the objectives of the organizations. e-CRM is about people, process and technology and these are key principal to success. Their study explores how e-CRM enhances the traditional meaning of marketing concepts and enabling the organizations to meet their internal marketing objectives. Means to motivate essential customers remain loyal with the enhanced features of e-CRM, where it makes the vast difference.

e-CRM-benefits to customers

Customers form hope of what will happen in their next encounters based on what they “deserve”. Zeithaml and Bitner (2000) recognize two levels of expectations, desired service and adequate service. Desired service represents the “wished for” level of performance and satisfactory service reflects showing more basic service expectations.

The importance of e-CRM technology in bank-customer interactions remains undisputed, commentators; nevertheless, emphasize how customer assessment is shaped by social and personal forces (Hollander, 1985). Interaction has got a very major place in the banking services. The relationship, which is maintained among customer and organization, has always a special place in the banking industry when compared to other industries. The interaction process has includes three key factors.

(1) Information trade.
(2) Business or financial (communication).
(3) Social exchange.

The bank should know what exactly the client needs; at the same time client should also make sure that has sufficient knowledge about the bank offerings. Confidence trust, ethics and friendship to a few extents are the aspects of the social exchange.

Convenience

According to James (1996) with the growing knowledge and superiority of the customers banks are now trying to woo the customer by determining the aspects, which are really vital for them. Thus, the aspects may comprise facilities, reputations, service, operation hours, interest on savings as well as on loan, location of the bank, convenience, friendliness, responsiveness, efficiency of
employees, ambience of the banks, etc. Convenience plays a very important role when selecting a brand and if the customers are not happy with the convenience of a particular brand. Location is considered to be convenient if it helps the customer to lessen the travel costs. Location too has broader impact on convenience includes time, place, acquisition, etc. A convenient location is often considered to be an additional service aspect of the core services.

**Speed of processing the transaction through e-Response**

Singh (2002) showed that fast processing of transaction through e-CRM, e-responses to customer queries, order acknowledgement, delivery and payment information via e-mails or automated responses are seriously appreciated by customers. It has also been highlighted that the nature of e-responses also helps in strengthen the bond between the supplier and the customer and makes up for the personal response that prevails in the conventional shopping arena. Another business examined that “a close relationship with customers can be developed from a distance with e-responses”. E-mail responses were broadly used by businesses to acknowledge receipt of instructions, payment and delivery of information.

**Trust**

According to Wong and Maher (1998), it is an attitude of trust amongst the partners of substitute. It is a vital characteristic for understanding the potency of marketing relationships. Trust is a vital relationship structure, which is found in most of all relationship models. Trust factor can be seen in a lot of ways like motivation to depend on an alternate partner and one who sees confidence in him.

**Service quality**

Service quality according to Boulding et al. (1993) contented customers. Service quality has its connections with the actions that are behavioral like the outcomes from a mouth of a human being. There is a lot of concentration that has been focused in the relationship between service quality and its outcomes such as profitability and maintenance of customers and their loyalty. Five magnitudes of service quality are reliability, responsiveness, quality, empathy and assurance.

Service quality according to Mosad (1995) is an important decisive factor that is being used by the customers in selecting a bank. Accounts, transactions accuracy, alertness, factors in subject with functional quality, availability of the information technology, helpful and friendly personal and effectiveness in correcting faults are the most significant determinants for the customers to determine the bank.

**METHODOLOGY (EMPirical FINDINGS)**

According to Zineldin and Bredenlöw (2003), case study is an approach for conducting research work which involves an empirical examination of a definite event within the context of the real world. This is an approach which do not only produces solutions to how, why, and what queries (Yin, 1994).

**Case one: State Bank of India (SBI)**

The development of State Bank of India can be traced back to the first decade of the 19th century. The State Bank of India emerged as a leader, with its operations carried out by the 480 offices including branches, sub offices and three local head offices, inherited from the Imperial Bank. Instead of serving as meager repositories of the community’s savings and lending to creditworthy parties, the State Bank of India catered to the requirements of the customers, by banking purposefully. The bank served the diverse financial wants of the planned economic development.

The commercial center of SBI is located in Mumbai. In order to cater to diverse functions, there are several other establishments in and outside Mumbai, separately from the corporate center. The bank brags of having as many as 14 local head offices and 57 zonal offices, located at major cities throughout India. It is recorded that SBI has about 10000 branches, well networked to supply to its customers throughout India.

The State Bank Group includes a network of eight banking subsidiaries and numerous non-banking subsidiaries. Through their combination of branch offices and online banking, SBI always improving convenience in internet by applying e-CRM. SBI is strongly committed to the society as a whole and keen to help bring about a sustainable type of societal development.

**e-CRM in SBI**

SBI has combined telephone banking and email banking by incorporating the two with their IVR system. SBI implemented a sophisticated multi-channel customer system throughout various regions and business units. In addition to telephone and email, these too include secure email, incoming fax and IVR integration.

Ninety percent of calls to the contact center are self-service calls. When customers email SBI with queries, their average wait time has improved from 24 to only 4 h and has noticed they are getting their queries answered correctly more quickly. Channel integration with e-CRM, the Internet is the core of all marketing efforts in media, advertising/campaigns, call centers, direct mail system, cooperation’s, personal meetings, search engines and events. Internet is the initial point when looking for goods, services, and satisfied customers. The web page should make acting on a purchasing conclusion easier. All marketing efforts must point to the web page (Source www.statebankofindia.com).

**Case two: HDFC**

HDFC Bank Ltd. is a commercial bank of India, incorporated in August 1994, after the Reserve Bank of India allowed establishing personal sector banks. The Bank was promoted by the Housing Development Finance Corporation, a foremost housing finance company (set up in 1977) of India. HDFC Bank has 1,412 branches and over 3,295 ATMs, in 528 cities in India, and all branches of the bank are connected on an online real-time basis.
The purpose of the Retail Bank is to provide its target market customers a full collection of financial products and banking services, giving the customer a one-stop window for all his/her banking requirements. The products are backed by world-class service and delivered to customers through the growing branch network, as well as through another delivery channels like ATMs, phone banking, net banking and mobile banking. The Bank is well positioned as a leader in various net based B2C opportunities including a broad range of internet banking services for fixed deposits, loans, bill payments, etc.

HDFC Bank is headquartered in Mumbai but has several branches in many cities. The Bank has a network of 1,725 branches spread in 771 cities across India. The Bank has a presence in all chief industrial and commercial centers across the country (Source: www.HDFC.com).

e-CRM in HDFC

HDFC team has set an apparent target garnering five million Internet customers by 2003. In addition, the bank hopes to maintain to attract high growth companies and affluent customers to its client base. “HDFC’s vision is to be the leading e-centric, customer-driven supplier of financial services in India,” For HDFC, that stop will be another significant destination as the institution makes its way down a very lengthy road through e-CRM; the HDFCs data store has reached one terabyte in size. The team expects more dramatic progress when e-CRM solution is in place. Five subject areas are in production and the team is opening to populate the system with marketing data in order to accomplish significant links with the e-CRM taking initiative and keeping in view its benefits which brings efficiency in business.

e-CRM benefits usage in customers

Case-1

Name of the customer: Sunny Arora
Occupation: Student
Holding account with: SBI
E-mail: Sunnyarora@gmail.com

Sunny said that he uses Internet banking to execute his transactions. He uses special services from the bank like online banking, and then debit cards to make purchases. But most frequently he uses the internet banking. About the function of e-CRM in improving the customer relation he said that it does a lot, but it is not noticeable to him.

About the e-CRM helping him, he was not confident enough if the e-CRM is really helping him. Technology plays a vital role in enhancing the role of e-CRM in developing the relationship with the organization. About the banks website, he added up by saying that he is pretty much pleased with the amount of information available to him on their official website, this was his opinion in general. He said of an instance where he had to open an e-account with the bank. He then opened an e-account whereby he could put the money to get fine interest rates.

About the response rate of the employees, he says that he had few awful experiences, but he never has to complain at the same time he has good experiences too. He feels that e-mail plays an important role for the growth of relationship with the bank. About the convenience factor, Sunny has an optimistic opinion, it is better and much easier for him to sit on the internet and do transactions. About the Trust he said that as the banks are government-regulated industries, there is no need for him to worry about his money.

Case-2

Name of the customer: Jagdeep upreti
Occupation: Professor
Holding account with: SBI
E-mail: Upreti.12@rediffmail.com

Respondent told that he uses internet banking as well as visits the bank for services. He utilizes services like online banking for making payments and has a visa debit card. Whenever he had to visit the bank in person, he said that the employees were very cooperative. But he said that there is only 1 branch office accessible and that is something, which irritates him a lot. As he feels that e-mail does not play any part in developing the relationships. Banks website provides good information about their services, products and their latest up comings. Convenience feature is something, which plays an important role in the development of relationship with bank.

According to the respondent, transaction speed is something he was certainly like to be faster, and he wishes to see the payment made on the same day. Quality of services like the definite services, effective means of safe guarding the information of customers transactions, using most recent technology for this and accuracy in maintaining the accounts.

Trust among the services of organization with the role of e-CRM does play a vital role in the growth of relationship with customers. He said that banks do need to follow strict policies, if not there are more chances that he may loose his own funds and the organization becomes bankrupted. It is a vital and a key factor to have trust in the bank.

Case-1

Name of the customer: Vaibhav gupta
Occupation: Student
Holding account with: HDFC bank
E-mail: VaibhavGupta0@gmail.com

About the trust factor, he said that he does belief his bank a lot. He uses internet to pay his bills and perform other normal transactions. He uses services like internet banking and visa cards as they are offered liberally to him, as he is a student. He did not face any sort of problems while performing the transaction on the internet. About the employees co-operation when he visits the bank is truly good. He does not, at all times, get any kind of e-mails or mails from the bank.

Vaibhav said that he frequently calls the bank. He said an example, which he faced recently, he was unable to withdraw the money through ATM at his city with his card, he instantly called the bank personal and explained the problem and the bank personal solved the problem in hardly any minutes. He never utilizes e-mail for communicating with the bank staff. About website and its content, he said that it is very simple for him to search for the information on their website. Convenience in his view does play an important role to develop the relationship. In his view, trust for him means the name of the organization. He trusts his bank a lot, and for him trust is more important to develop relationship.

Case-2

Name of the customer: Rachit Patel
Occupation: Student
Holding account with: HDFC bank
E-mail: hi_Rachitpatel@yahoo.co.in

Rachit has a positive attitude about his trust in the bank. His connection with the bank is very good. He uses services like domestic debit card, ATM, payment services method, which includes
cheque book, as all the services are at no cost to him.

The bank had a constant touch with him by sending him e-mails regularly about their fresh services and products and promotions to his account. Usage of e-CRM has certainly enhanced his relationship with the bank he says. He said e-mail does help out in developing and maintaining the relationship. About the website, he said that information concerning services and products could be found out easily.

Convenience of making payments makes him at ease with the site. Trust is important to develop the relationship. Regarding the transaction speed, he said that if he makes payments before 10 a.m., payment goes on the same day itself. But still he is content with transaction speed and their security. The respondent sees working hours as the features for quality services. Lasting relationship, e-CRM has absolutely developed his relation with the bank he said.

**Data analysis**

According to Zikmund (2000) data analysis is the demand of reasoning to understand and infer the data that has been collected about a particular subject. In simple account description analysis may involve shaping constant patterns and summarizing the suitable details revealed in this study. Zikmund (2000) further says that it is a procedure where by analysis begins after the data collection. During the phase of the analysis, interrelated procedures are performed in order to sum up and reorganize the data.

**Customers of SBI**

**Case 1: Sunny Arora**

A. Customer interaction and satisfaction: Respondent mentioned that he is fully content with the cooperation of employees in the organization. The rate of satisfaction and communication that he gets goes in line with the theory of Hollander (1985) and Czepiel (1990) where by both employees of the organization and the customers have important roles to play in the process of interaction. Banks as well as the customers need to have essential knowledge of the offerings of the customers.

B. Convenience: Sunny has a positive view about the convenience factor. He said that it is very convenient for him to just sit at office or at home and carry out transactions on the internet. His views on the convenience are location of the bank and the way in which the employees react support the theory presented by James (1996).

C. Speed of processing the transaction through e-response: Theory of Singh (2002) says that rapid replies to the queries of customers, automated replies and the rate of processing the transaction with the aid of latest available e-CRM methods are greatly appreciated by the customers. His opinion against the function of e-mail to generate a quick response does not support the theory.

D. Service quality: Respondent views on quality of services being provided goes in this way, Sunny would like to see the employees of the organization to be more familiar with the transactions accurateness, immediate response to the queries, and usage of the latest IT aids to provide better services. Findings from the views of Sunny support the theory of Mosad (1995) whereby author clarify the importance in handling the transaction, being friendly with the customers, dealing with the accounts in a right manner.

E. Trust: Sunny’s response towards trust is that he feels his money is safe and safe with this organization as they are under the government rules and regulations. Findings from the words of Sunny completely supports the theory of Singh (2002), as author tell us that organizations have taken all the required measures to see that they have secure and accurate transactions on their websites and through the services of the organization.

**Case 2: Jagdeep Upreti**

A. Customer interaction and satisfaction: Jagdeep showed lot of interest about his communication and satisfaction with the bank. His response was that internet banking is the major way of interacting with bank. He finds the employees to be very cooperative and have a complete knowledge of banks products and services. These views of respondent goes in way with the theory of Hollander (1985).

B. Convenience: The evidence from Jagdeep entirely supports the convenience factor in this study. According to James (1996), convenience is a very important point of consideration for choosing a bank. Convenience factors like location of the organization, friendliness of the employee’s, instant response are seen to be very important. Jagdeep response goes with the theory as he feels that convenience is a significant factor for him in the development of his relationship with the bank.

C. Speed of processing the transaction through e-response: The theory speed of processing transaction (Singh, 2002) explains that immediate e-response to the questions of the customers help to strengthen the relationship with the bank which is contrary to the response of Jagdeep. He said that he not at all gets any kind of e-mails from the bank; at the same time he is not interested to contact them through e-mail as the response to it may take a little bit time. This reaction goes offline with the theory.

D. Service quality: Jagdeep reply to service quality goes inline with the theory (Mosad, 1995). Theory states that organization accuracy in handling the transaction, effective and friendliness of employees provides improved quality in terms of services.

E. Trust: According to Jagdeep his trust among the services of the organization role of e-CRM increases his trust in the organization. This finding from the words of Jagdeep fully supports the theory of Singh (2002), where author see that organization have incorporated secure measures or the transmission of transaction.

**Customers of HDFC**

**Case 1: Vaibhav Gupta**

A. Customer interaction and satisfaction: Respondent mentioned that he interacts with the bank through telephone banking in case if any necessity arises. He never sends any e-mail to the bank for his communication and relations. This response of the respondent strongly agrees with the theory of Hollander (1985) and Czepiel (1990) where in theory explains that banks should have sufficient knowledge of their offerings in order to have a long lasting relationship with the customers.

B. Convenience: View of Vaibhav regarding convenience is that it plays a very important role to develop the present relationship with the bank. He is satisfied with the suitable working hours of the bank. Bank is located in the middle of city.

C. Speed of processing transactions through e-response: Vaibhav does not see any threats from the misuse of his financial information while performing the transaction on the internet. He is disappointed with the speed at which his transaction is being processed. He said that he would desire to e-mail the bank if he feels that he can get an immediate reply. His views partly agree with the theory of Singh (2002).

D. Service quality: Respondent examines good amount of quality in the services of HDFC bank. He says bank uses most recent technology available for the functioning of the bank and their efficiency in handling the transactions. Respondent completely agrees with theory of Boulding et al. (1993) and Mosad (1995) where in service quality features like reliability, responsiveness, and accessibility of the information technology are the important factors.
for determining features of a quality service.
E. Trust: Vaibhav never had any occasions where he had troubles while performing his transactions on the internet. Information about his transactions are kept back confidential. That brings lot of faith for him in the organization. This response of the respondent completely agrees with the findings presented in the theory of Singh (2002).

**Case 2: Rachit Patel**

A. Customer interaction and satisfaction: Rachit has a very optimistic opinion about his interaction and satisfaction that he gets from them. He said that employees at HDFC are welcoming and prepared for assistance. This agrees with theory of Hollander (1985) long-term relationship by satisfying customers, good knowledge about bank offering is some features for successful interaction and satisfaction.
B. Convenience: Respondent supports with the clarification in the theory of Saranow (2005). He said that location of the bank at the middle of the city is a convenient factor for him. Convenience of making payments on the internet throughout the day, helpful employees is the most convenient factors.
C. Speed of processing transactions through e-response: Rachit is happy at the speed at which his transaction is being processed. His opinions agree with the theory of Singh (2002), where in e-mail does play a vital role for the growth of the relationship with the bank.
D. Service quality: Theory on service quality (Mosad, 1995; Boulding et al. (1993) gives importance to reliability of the services, friendly personal, accurate way of managing transactions, functioning hours of the bank are seen as the determinant factors for the quality service. Rachit did not provide us with any empirical facts to differentiate with what the theory says.
E. Trust: Respondent believes that trust has to do a lot with his association with the bank. He states that if he does not trust bank and its services he will not be putting his money into it. This finding agrees with the justification given in the theory of Singh (2002).

**Cross case analysis of banks customer variables**

A. Customer interaction and satisfaction: The empirical details that have been collected from five different variables by interviewing four customers from different banks have been presented in Table 1. The response from the 4 cases show that customer interaction and satisfaction was considered as a significant benefit that is provided by the banks through usage of e-CRM (+) sign in showing which customer is in agreement with this variable.
B. Convenience: Empirical examination of variable 2 shows that all respondents perceive convenience as a benefit provided by e-CRM. It reveals out that location of bank, being friendly with customer's efficiency of employees handling banks services as a key benefit that can build a good relationship with bank. All the respondents agree with theories justification.
C. Speed of processing the transaction through e-response: From Table 1, column 3 shows that 2 respondents from both the banks see speed of processing their transaction through e-response as an important benefit offered to them through e-CRM. (Case-2 (SBI), but do not agree with clarification provided in theory [Case-1(HDFC)] has equally the positive and negative opinion against the theory.
D. Service quality: All the 4 customers acknowledge the significance of quality in the services of organization. The empirical evidence proves that trustworthy employees, good responsiveness, and accuracy in managing the services of bank, availability of newest information technology, and helpful friendly employees constitute important features for quality services.
E. Trust: Column 5 In Table 1 shows empirical evidence about trust factor; it is very clear and evident from reaction of customers that they see trust as the important and leading aspects that improve their key relationship with the bank.

**Conclusions**

1. Customer interaction and satisfaction is found to be a key advantage provided by banks using e-CRM.
2. Convenience is a main benefit provided to the customers of the banks.
3. Speed at which the transactions have been processed and their rate of accuracy is a benefit provided by banks through the usage of e-CRM.
4. Reliable employees, availability of the latest information technology were some of the extra benefits provided by banks to its customers.
5. Trust in the overall services of the organization is an important advantage provided to the customers.

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