



Applications of Information Technology Using E-commerce for CRM & E-CRM

Research Paper—Computer Science

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Introduction:—The term Electronic commerce or e-commerce consists of all business activities carried on with the use of electronic media, that is, computer network. It involves conducting business with the help of the electronic media, making use of the information technology such as Electronic Data Interchange (EDI). In simple words, Electronic commerce involves buying and selling of goods and services over the World Wide Web.

Customers can purchase anything right from a car or a cake sitting comfortably in his room and gift it to someone sitting miles apart just by click of a mouse. Shipping method is generally used for the delivery of the goods ordered.

Every Bank which is highly leading now performs their transaction through computer and computer is not only the concept can make off the transaction automatic. All the commercial application now transfers to the concept of e-commerce and is one of the very important aspect for carrying bank transactions falsity. In the commercial world surrounded by highly competitive and volatile market conditions, any new concept or technology would be acceptable only if it provides strong benefits to all concerned. E-commerce offers some distinct advantages. **1. Portability:**—Improves bottom line of and organization.

2. Expanded Market Share: A some component can be handled by multiple customer at the same time.

3. Supply Chain Integration Cycle: All operations become flexible and customer friendly. Based on the nature of transactions conducted through e-commerce, most internet based commerce activities can be broadly classified in categories B2B, B2C, C2B, C2C, G2B

E-Commerce in India:—The low cost of the PC and the growing use of the Internet has shown the tremendous growth of Ecommerce in India, in the recent years. According to the Indian Ecommerce Report released by Internet and Mobile Association of India (IAMAI) and IMRB International.

“The total online transactions in India was Rs. 7080 crores (approx \$1.75 billion) in the year 2006-2007 and expected to grow by 30% to touch 9210 crores (approx

\$2.15 billion) by the year 2007-2008. According to a McKinsey-Nasscom report the e-commerce transactions in India are expected to reach \$100 billion by the 2008. Although, as compared to the western countries, India is still in its initial stage of development.

Scope of Ecommerce:—Home Internet usage in India grew 19% from April 2006 to April 2007. In April 2007 it became 30.32 million and the eMarketer accept that there will be 71 million total Internet users in India by 2011. India is showing tremendous growth in the Ecommerce. Rival tradeindia.com have 700,000 registered buyers and it has the growth rate of 35% every year which is likely to double in the year 2008. Indiamart.com claims revenues of Rs. 38 crores and has a growing rate of 50 every year. It receives around 500,000 enquiries per month.

Undoubtedly, with the middle class of 288 million people, online shopping shows unlimited potential in India. The real estate costs are touching the sky. The travel portals' share in the online business contributed to 50% of Rs 4800 crore online market in 2007-08. The travel portal MakeMyTrip.com has attained Rs 1000 crores of turnover which is around around 20% of total e-commerce market in India. Further an annual growth of 65% has been anticipated annually in the travel portals alone.

How to attract Indian “Online Customers”?· Goods should have value for the customer along with quality. · Security is promised. · Selling Brand articles. · Establishing trust and winning confidence. · Providing easy guidance. · Clear information regarding delivery time. · Articles ordered and the article delivered should not vary. · Giving discount offer and other gift items. · Limited personal information.

· Providing value added service at lower prices. · Full information regarding the product is simple words. · Innovative products. · Social shopping phenomenon. · Providing price comparison.

· Transparent information regarding the product. · Indian customers want to buy things that do not cost them much.

E-Commerce and CRM:-CRM stands for **Customer Relationship Management**. It is a process or methodology used to learn more about customers' needs and behaviors in order to develop stronger relationships with them. There are many technological components to CRM, but thinking about CRM in primarily technological terms is a mistake. The more useful way to think about CRM is as a process that will help bring together lots of pieces of information about customers, sales, marketing effectiveness, responsiveness and market trends.

CRM helps businesses use technology and human resources to gain insight into the behavior of customers and the value of those customers. e-CRM is combination of software, hardware, application and management commitment. e-CRM can be different types like Operational, Analytical. Operational e-CRM is given importance to customer touch up points, which can have contacts with customers through telephones of letters or e-mails. Thus customer touch up points is something web based e-mails, telephone, direct sales, fax etc.

Analytical CRM is a collection of data and is viewed as a continuous process. It requires technology to process customer's data. The main intention here would be to identify and understand customers demographics pattern of purchasing etc in order to create new business opportunities giving importance to customers. According to Feinberb (2002) an important and valid advantage of web-based e-CRM is amount of information available to customers browsing. At the some 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.

e-CRM technology:-New technologies will soon change the way customers interact with business enterprises and other customers in EC relationships. Several studies have looked into how interfaces affect online consumer behavior and the results have been mixed. As new technologies emerge for mainstream use in EC it will be important to assess their efficacy in relation to e-CRM.

They also recommend several key research questions: (1) What will be the effects of technology on service quality (reliability, responsiveness, assurance, empathy, tangibles)? (2) How will demographics interact with technology? (3) Is customer loyalty altered when interacting with technology compared to employees?

e-CRM-BENEFITS TO BANK :-Computers, information technology, and networking are fast replacing labor-intensive business activities across industries and in government. Since the early 1990s, the computer, the internet, and information technology have been merged to become a viable substitute for labor-and paper-intensive banking processes between and across commercial bank.

This has been seen in the widespread use of the ATM, credit cards, debit cards, smart cards, and landing through e-CRM via the Internet. This type of computer-based bank-to-bank, bank to consumer and consumer-to-consumer transactional and informational exchange has been referred to as Electronic Commerce (EC). The term EC which taken place out of e-CRM and benefits of e-CRM to bank and its customers presented below, Elias M. (2000) · Relationship with customers · Using e-mail for business communication · Personalized services or one to one services · Establishing a Web site to market products or services · Transaction Security

e-CRM-Benefits to Customers:-* Interactions with customers and satisfaction * Convenience * Speed of processing the transaction through e-Response * Service quality * Trust

Benefits of CRM for Customers and Bank e-CRM

e-CRM-Benefits to Banks	e-CRM-Benefits to Customers
Relationship with the customers	Customer's interaction and satisfaction
Using e-mails for business communication	Convenience
Personalized services or one to one services	Speed of processing the transaction Through e-Response
Website to market products or services	Service quality Trust

Need and Importance:-a bank needs an open e-commerce platform that can: • Integrate new e-commerce applications with existing applications to optimize IT investments and save on reprogramming and management costs • Provide the power and scalability to handle multiple workloads, shift resources to match changing workloads, handle unpredictable peaks, and grow with your business

• Provide rock-solid security and advanced services availability for transactions all the time, around the world – absolute essentials for competitive banking • Exploit the value of your customer and market data by deploying business intelligence (BI) and customer relationship management (CRM) software to help you better anticipate, understand and respond to customer wants and needs

• Unify your enterprise management chain with an open server platform that integrates purchase and sales

processes with information on customers and product offerings for more timely, targeted and personalized customer service • Integrate future technologies and new ways of doing business with customers. For making any transaction of bank which is very complex can translated or available in a user friendly environment through the concept of Internet Banking as.

• Access the Bank's website • Explore the option which provide Internet Banking • Provision of user id and password • Perform the requisite transaction. • Logout or exit. In future, Internet portal will play a key role in banks customer relations strategies

In the presence of big resisters for maintaining manual Banking system it creates to many difficulties as will as nobody or the employee of bank can not show the record at right time. Concept of Data ware house is implanted for solving the above problem. Data ware house means a central repository of all critical data which helps to the management to take decision based on authentic information. Data ware housing is a basic foundation for DSS.

It collects raw data from various applications in an organization system, integrate the data into logical and uniform model of business subject area. We can apply OLAP as well as DATA MINING for these large database.

Objectives:- 1. General customer who does not understand the concept of e-banking can handle banks transaction. 2. Due to security provision no chances of fraud as well as small functions in banks. 3. Any bank customer can observe his account transaction at home through Internet Service. 4. To observe status of Account e.g.balance in the account. 5. Fund transfer. 6. online payment for commerce actually done through Internet. 7. Request for issue of cheque book ,Draft etc. 8. Access to information regarding steps,formalities involved in opening of accounts 9. Access to prevailing rates of interest,details of schemes and products offered by such bank.

Hypothesis :

1. Identifying new and existing clients increases the level of customer service.
2. Differentiating between the services offered to new and existing clients increases the level of customer service.
3. The level of customer service is increased if there is an active interaction with potential and existing clients.
4. The level of customer service is increased if customised service is offered according to each individual client's needs.
5. Organizations with superior CRM capability display a greater propensity to capture higher levels of performance relative to competitors.
6. Organizations are best positioned to capture the benefits of CRM when senior managers believe strongly in the benefits of CRM.

Research Methodology:- Selection of the methodology is based on the research problem and resented research questions. Research Methodology for this research is described by following steps. 1. Developing Customer-centric processes 2. Selecting and implementing technology solutions. 3. Empowering employees. 4. Building Customer information 5. Knowledge generation capabilities to differentiate between customers. 6. Developing the ability to learn by best practice

Support of IT Act:- With the advancement of Information Technology & to derive the inherent advantages of its implementation, there was a long felt need to give legal revognition to the electronic records as an alternative to paper based records. The IT bill 1999 introduced in budget session of 2000 received from both houses of parliament & since become law of the land after receiving assent from honorable president of India.

Consequent upon passing of IT Act, the Indian Penal Code, Indian Evidence Act, 1872; the bankers book of Evidence Act 1891; & RBI Act, 1934 have been suitably amended in order to achieve the objectives of IT Act 2000. India is now only the country in the whole of South Asia to frame legislation for e-commerce & Internet.

R E F E R E N C E

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E-Banking – By Vasu Deva

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