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# **A STUDY ON AMAZON: INFORMATION SYSTEMS, BUSINESS STRATEGIES AND e-CRM**

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2014

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## **Background:**

For the last two decade Amazon.com has been serving customer worldwide. Amazon.com was founded by Jeff Bezos back in 1995. The founders vision was to build a virtual shopping place for book lovers. Amazon.com brings the world largest book store to the door step of the people around the world. All people has to do is search and select the desired book. It took 30 day to deliver books to the customers of 50 states and 45 countries.

Amazon.com was a huge success in nineties. Amazon.com became a platform for the retailer and individuals in 2000. Amazon.com offers their services towards four types of customers, consumers, sellers, enterprises and content creators. (Annual report 2013)

Amazon serves customer through the popular web site [www.amazon.com](http://www.amazon.com). Now a day customers can access through mobile technology. Amazon.com apps are also available for the customers.

## **I. Part 1: Information Systems utilized for internet activity**

### **1. Information System:**

In 1995 Amazon used website system and order fulfillment system separately in order to improve security. By 1995 amazon has huge database running on Digital Alpha Servers. Amazon renovated the entire system in the year of 2000. Company spent \$200 million on the new system. These systems include analysis software from “Epiphany”, logistics from “manugistics” and new DBMS from oracle. (Gerald, 2012)

For communication with supplies amazon seal deal with Excelon for business-to-business integration system. (Konicki, 2000) . Amazon Web Service (AWS) and Simple Storage Service (SS) are the main system developed by amazon. Through this system amazon can maintain its vast number of products and millions of active customers.

Amazon web service has become a global platform for individual to retailers to sell their products. Through reliable, Scalable, and robust web service amazon creates a global domination. The challenges of amazon.com web services are very prominent. Every second thousands of customers are searching. For products and ordering products, the systems have to

be fast, reliable and secured. Every second CRM (Customer Relation Management) system is taking customer information through their searching, data mining, wish list and so on. Whatever customer buys or not they are providing information about them. Systems are smart enough to analyze the information and provide service accordingly.

For tracking fraudsters amazon.com built a system known as SAS( Smart Analysis Search). This system decrease and detect fraud in the web site by analyzing behavioral pattern. SAS allows amazon.com to measure and personalize customer and help to serve customer effectively. (Kantardzic, 2003)

Amazon.com is information system based on Service Oriented Architecture (SOA). SOA is fully distributed and decentralized service platform enables amazon's information system to be robust and scalable. SOA concentrates in multiple application rather than bigger process.

## **2. Transaction Processing System:**

Every customer has his profile in amazon.com or must have a profile in order to order any product. Amazon offer many features to personalize their profile with web tools like shopping cart, wish list.

### **2.1. 1-click purchase:**

Amazon brings 1 click ordering, personalized shopping services and easy to use card transaction, e-mail communication with customers and direct shipping around the world. (1999 Annual report) Customer with previously activated functionality can order items clicking only one button without fulfilling order form. Amazon's secured server automatically provide the information required for the registered customer. (Annual report 1998)

### **2.2. Secure Credit/debit card payment:**

For secure transaction amazon.com use secured server software. Customer's personal information, credit card number and everything is encrypted in order to secure information over internet.

## **3. Recommendation System:**

Amazon developed an intelligent recommendation system which recommends items by customer's past purchases and searching data. This system store every order made by customer. For example if a customer buy a fiction book then the recommender system will recommend related books to the customer. The system is basically based on "linking" and "Data mining".

Every movement or search queries are noticed and tracked down to provide the best possible recommendation. This enhances the browsing experiences of the customers because this acts as an interactive platform between website and customers which help maximum customer satisfaction.

### **3.1. Interactive searching System:**

Amazon provides interactive searching option to the customers. Customer can select desired items catalogs to find the item. Millions of items can be gained by searching tools. (Annual Report 1998)

## **4. Supply Chain Management (SCM):**

For the huge success by 2004 the “Supply Chain System” played a huge role. In 2000 amazon spent good amount in order to build automated warehouse and automated supply chain management. (Jenkinson 2005, business week 2003) All the supply chain activities are controlled by CRM system. (Gabe 2010)

### **4.1. Enterprise Resource Management (ERP System):**

Amazon uses oracle as the ERP. It has huge database which hold information related to customer. Customer’s ordering process is automated as the order is taken as it automatically find the nearest distributing center for the delivery. (Bacheldor, 2004)

This system fastens the order fulfillment process with the order tracking and reduces any distribution mistakes. By this system the company reduced 50% of its customer service contacts since 1999 because of fewer mistakes. (BusinessWeek, 2003)

### **4.2. Customer Relation Management (CRM):**

In order to gain customer satisfaction and loyalty amazon use Customer Relationship Management system (CRM). CRM system follows the following application to collect information of the customer.

All personal information of customers their credit card record, transaction record, order record, profile, their past purchase history are collected in the database.

The order processing system takes care of the transaction record with secured transaction method and it delivers instruction to the delivery system for the execution of shipment.

Through customer feedback, customer interest, wish list, product reviews web page system collect customer information.

Automated communication is ensured with customers through e-mail and message systems and order information systems. (Jenkinson, 2005; Hottovy, 2011) With the CRM system amazon successfully integrates customer sales, services and communication. (Jenkinson 2005; Manjoon 2011)

## **II. Part 2: Business strategies applied for internet activity**

In early stage of the amazon.com's journey, the business strategy of amazon.com was very simple and forward. Their one and only strategy was to sell books to the customer through online. They invested to the customer and offer them a huge collection of books through online.

"From the beginning our focus has been on offering our customers compelling value. We realized that the web was and still is the World Wide Web. Therefore we set out to offer customer something they simply could not get any other way and began serving them with the book." -Jeff P. Bezos (shareholder's letter 97)

Amazon.com attracted customers by offering 1-click shopping, low price and increasing customer's value. Creating easy to use and easy to learn customer interfaces was a key aspect of Amazon's strategy. (Jarvanpaa, S.L., Tiller,E.H.)

### **1. Smart Innovation Strategy:**

The main reason of the successful journey of amazon.com so far is the innovation strategy of the company. Amazon.com started the business by offering DVDs and CDs alongside books.

In the following year they brought auction theme to the customer. Their strategy was to provide customer better experience of auction by protection from the fraud to the bidder though this strategy did not bring success to the company.

Amazon followed B2C (Business to Customer) model. But it again changed its strategy and transformed from direct sales business model to sales and service model. Through this model amazon's target group was customers and other business group.

Amazon.com offered small business group to use amazon web service and platform to offer their product to the customers. Amazon took commission on each sell of other retailer's product.

Through this service amazon created eco system in the market. Through 'Amazon Associates Program' amazon created and developed partnership with customers and businessman. The primary goal of the program was to acquire new customers to boost the sales on Amazon.com. Amazon instead gave them its affiliates a revenue share. (ISCKIA and LESCOP)

This allowed amazon to extend its market place into a broad section from a single product. There was a change in model in Amazon business strategy. It was a cyber- book store and with the

affiliates and association of the other retailer and being a platform to the others it became a cyber-market.

## **2. Customer Relation Management Strategy:**

When a customer first enter into Amazon.com he/she is provided 'Featured Product' by the website, But when the customer visit for the second time the recommender system automatically provide products by studying customer interests and personality.

Customer acquisition and retention has been the most priority to Amazon.com's strategy. Through web site Amazon maintain sophisticated communication that automates the process of creating value for the customer. (Jakinson and sain)

Jeff Bezos 3 big idea –

1. Limitless inventory
2. Customer Care
3. High margin, lowest price. (FABERNOVEL)

## **3. Limitless Inventory:**

When amazon started offered books to the customers. But over the period it increased its products from books to music, movie, cloud storage, gaming and many more. Porter mentioned three distinct sources-

1. Serving few needs of many customer
2. Serving broad needs of few customer
3. Serving broad needs of many customers.

(Porter, 1996)

Initially amazon was followed first source of serving with few products. But it changed its strategy over time and now it fits into third sources.



#### **4. Customer Care:**

“If you do build a great experience, customer tells each other about that. Word to mouth is very powerful” - Jeffery p. Bezos

One of the success factors of amazon.com is word of mouth. Because of excellent customer service customers trusted Amazon. They used to talk about Amazon.com to other. This spread rapidly by creating increasing traffic on the web site.

#### **5. High Margin, Lowest Price:**

Amazon.com provides products significantly cheaper than its competitors. One of the main visions of Amazon.com is based on the long term plan. (1997 Stockholder report) This makes easier for amazon to take risk of low profit in order to succeed in future.

An estimate shows how it is possible for amazon to become profitable with lowest price. A product on average gets sold in 33 days through amazon.com. On the other side its competitors like best buy took 70 day to sell the product. (FAVERNOVEL)

Amazon keeps the best-selling product to its own stock and longer tail items to third party sellers stock. This gives an advantage to the company.

#### **6. Marketing and Promotion Strategy:**

Amazon's marketing strategy remains as strategy brand name, increasing customer traffic, customer loyalty. To gain so amazon.com undergone various promotional method. Public relation activities, online and traditional advertising including radio, television and print media are the prominent.

#### **7. Associate Program:**

To boost the customer traffic and rate of sale amazon.com started an associate program with customers and small businessman. Approximately 200,000 websites have enrolled in the associate program. (Annual report 1998)

### **III. Part 3: e-CRM cycle Conducted for internet Activity: Customer Relationship Management**

In today's business world CRM is no longer considered as a trend rather as a standard requirement. For competitive advantage and increased revenue, in most of the case with effective CRM every company have resulted increasing revenue and profit as well as greater customer loyalty.

“Customer Relationship Management is to identify a company's best customer and maximizing the value from them by satisfying and retaining them.” Kennedy (2006)

#### **1. Electronic Customer Relationship Management:**

The application of CRM to internet based e-commerce business is the basic concept of electronic CRM (E-CRM). Pan (2003) said “e-CRM provides the ability to capture, integrate and distribute data gained at the organization's website throughout the enterprise.”

In today's world e-commerce platform does not bind itself in single channel rather expanded toward multichannel using internet, web browser, e-mail, PDA, smartphones etc. e-CRM solution supports marketing, sales and service of the rapid growing online based business.

A recent study revealed that a 10% gain in repeat customer arise 10% to the revenue of the company. (Scullin, Allora, Lloyd, Fjermestad)

Amazon.com successfully integrated CRM system. Amazon innovated number of approach to gain and satisfy customer through the implementation of electronic customer relationship management.

No one in the world better understand to their customer better then amazon. This yields maximum revenue to amazon.com over the competitive world and kept always 1-step ahead of its competitor like e-bay, best-buy.

#### **2. How amazon implement CRM:**

Amazon has extensive implementation of customer relationship management. Each and every customers are taken in account in amazon.com.

##### **2.1 Customer Selection:**

Customer selection part through Amazon.com website has given amazon a extra benefit in order to boost their business. Amazon uses numerous methods to select customer by knowing their customer behavior. Amazon's early target was people who love books. But days its target market is vast and challenging.

Amazon through their website, PR strategy target people to motivate them to use amazon.com.

## **2.2 Customer Acquisition:**

### **2.2.1 Customer account:**

Every customer buying through amazon.com has his/her profile in amazon website. Amazon.com creates a database to store the account, information of the customer, credit/debit account.

Through the customer account amazon knows about the customer, their personality and last of all can satisfy them.

### **2.2.2 Wish List, review system:**

Amazon always encourage customer to add favorite items to the wish list. This helps amazon to know better about the customer. Product review by customer not only be help customers to find and select product but also acts as direct marketing event for amazon.com.(Jerkison and sain)

Amazon allows making connection in between the customer, communicating and viewing their interest help to amazon to gain customer trust and initiate word of mouth.

In the first 3 month of 2000, amazon acquired 3 million new customers without any investment.

To satisfy customer amazon uses information acquired through customer account, wish list etc. Amazon brought number of system to satisfy customer. 1-click ordering has been an excellent system innovated by amazon which revenue less than 20 sec to enable purchase. (Jenkison and sain)

## **2.3 Customer Retention:**

Amazon.com emphasizes customer retention over just acquisition. An analysis shows 40% of amazon's customers are frequent users [Jenkison and sain]. This indicates customer always come back to purchase product in amazon.com. Amazon does retain customer very smartly and sincerely by satisfying its best buyer through good service and effective communication.

Amazon founder Jeffery P. Bezos said “The optimal to do is to spend 70% of your time, energy, focus and dollars building great customer analysis and 30% shouting about it.

Integrating lean advertising, service and selling amazon acquires customer and through great customer experience it retain the customer.

## **2.4 Customer Extension:**

The market place is very competitive even for amazon.com with competitor like e-Bay, bestbuy breathing very behind amazon. Customers now days get every single distraction through other competitor’s service and brand value. It is very challenging to every retain customers

When people ask me if our customer are loyal I say, “Absolutely right up to the second somebody else offer them a better service “Jeff Bezos

The comment explains how challenging the market is. But even though Amazon’s better customer service, trust factor, brand value initiate them rapid and growing customer popularity. About 70% of amazon’s customer trust amazon and recommend amazon to their friend [Jenkison and sain]

Amazon integrated communication in between customers. This helped amazon to retain even extends their customers. Customer’s reviews of products trusted by other customer and motivate them to buy.

## **IV. Part 4-Recommendation for Amazon.com:**

Amazon.com is the ultimate online retailer around the world. Its nearest but not even close competitors are e-bay and best buy. But the competition is growing day by day.

### **1. Competing in the market:**

Like past, amazon in future will have to come up with special something. The global market is changing day by day. Business competitors are investing large to take amazon down. There is no room for relaxation. It is very challenging and has to be consistent in the market to be number one retailer shop.

## **2. Innovation of new Product:**

It is essential for amazon to think out of the box and bring new products to satisfy and retain customer to be loyal to amazon.com. Amazon always offered its customer better quality and better service. But in future it may not be the same. People in today's world ask for more. Amazon has to be smart enough to understand the customer need before even customers know about it.

## **3. Integration of New Technology:**

Technology is making progress like the spread of light. Company like 'amazon' needs to be adaptive and technology friendly to retain its domination in the market. Amazon's new technology of

Drone delivery system indicates it is planning and investing significant amount of money in technology for near future.

## **4. Customer Loyalty:**

For a upward revenue stream customer loyalty is essential.. Amazon's most of the buyers are its repeat customers who are loyal to amazon. But growing competition can be a risk to amazon's loyal customer.

## **5. Global Expansion:**

Amazon is expanding its business around the world. But this may cause significant strain in number of sectors like management, inventory, supply system and more over to amazon's market place.

"We may not be successful in our efforts to expand into international market segment" (annual report 2013)

International market is very challenging because of political and economic conditions. Upgrading e-CRM and investing more towards customer information for better understanding the customer needs and behavior is essential.

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