

# Overview of E-Commerce

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**Abstract** -With the growth of Internet, electronic commerce & its applications are increasing day by day. E-commerce is a fast growing technology which is totally based on internet and networking. This research gives insight about E-commerce in various fields in the online shopping, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange. With the rapid development of e-commerce, security issues are arising from people's attention. The security of the transaction is the core and key issues of the development of e-commerce.

## I. INTRODUCTION

Electronic Commerce is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products. Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for human to reduce physical work and to save time. An important aspect of e-commerce is prompt and secure payment, clearing, and settlement of credit or debit claims.

Everyone agrees that the payment and settlement process is a potential bottleneck in the fast-moving electronic commerce environment if we rely on conventional payment methods such as cash, checks, bank drafts, or bills of exchange. Many companies have taken advantage of the web and e-commerce to reduce cost, improve revenue and increase customer service. E-commerce implementation involves the use of computer and telecommunications technologies to improve business processes.

The number of internet devices in 1984 was 1,000 - one thousand  
The number of internet devices in 1992 was 1,000,000 - one million  
The number of internet devices in 2008 was 1,000,000,000 - one billion

## II. TYPES OF E-COMMERCE

Various types of e-commerce platforms fall into several industry classifications based upon their licensing model, sales scenario and data exchange

### A. Business-to-Consumer (B2C)

In a Business-to-Consumer E-commerce environment, companies sell their online goods to consumers who are the end users of their products or services. Usually, B2C E-commerce web shops have an open access for any visitor, meaning that there is

no need for a person to login in order to make any product related inquiry.

### B. Business-to-Business (B2B)

In a Business-to-Business E-commerce environment, companies sell their online goods to other companies without being engaged in sales to consumers. In most B2B E-commerce environments entering the web shop will require a log in. B2B web shop usually contains customer-specific pricing, customer-specific assortments and customer-specific discounts.

### C. Consumer-to-Business (C2B)

In a Consumer-to-Business E-commerce environment, consumers usually post their products or services online on which companies can post their bids. A consumer reviews the bids and selects the company that meets his price expectations. An example of this could be a job board where a consumer places her requirements and multiple companies bid for winning the project.

### D. Consumer-to-Consumer (C2C)

In a Consumer-to-Consumer E-commerce environment consumers sell their online goods to other consumers. A well-known example is eBay. Since eBay.com is a business, this form of ecommerce could also be called C2B2C ecommerce

## III. BUSINESS USE OF E-COMMERCE

The followings are the business uses of the Internet. These services and capabilities are a core part of a successful e-commerce program. They are either parts of a value chain or are included as supporting activities:



figure10: Business Lifecycle of E-commerce

- Buying and selling products and services
- Providing customer service
- Communicating within organizations
- Collaborating with others
- Gathering information (on competitors, and so forth)
- Providing seller support
- Publishing and distributing information
- Providing software update and patches

#### IV. DATA FLOW DIAGRAM

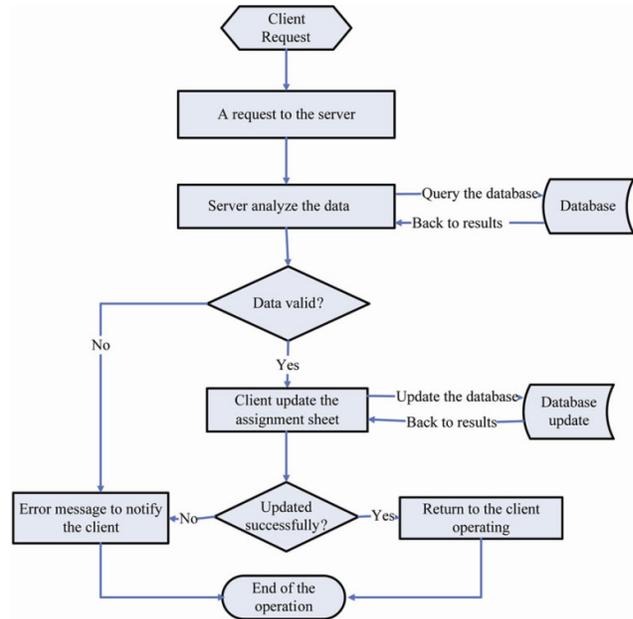


figure2: data flow diagram of E-commerce

#### V. E-COMMERCE SECURITY TOOLS

- Firewalls – For Software and Hardware
- Public Key infrastructure
- Encryption software
- Digital certificates
- Digital Signatures
- Biometrics – retinal scan, fingerprints, voice etc
- Passwords
- Locks and bars – network operations centers

#### VI. ADVANTAGES OF E-COMMERCE

E-Commerce advantages can be broadly classified in three major categories:

- Advantages to Organizations
  - Using E-Commerce, organization can expand their market to national and international markets with minimum capital investment. An organization can easily locate more customers, best suppliers and suitable business partners across the globe.
  - E-commerce improves the brand image of the company
  - E-commerce helps organization to provide better customer services
  - E-Commerce reduces paper work a lot

### B. Advantages to Consumers

- a. 24x7 support. Customer can do transactions for the product or enquiry about any product/services provided by a company anytime, anywhere from any location.
- b. E-Commerce application provides user more options and quicker delivery of products
- c. E-Commerce application provides user more options to compare and select the cheaper and better option.
- d. A customer can put review comments about a product and can see what others are buying or see the review comments of other customers before making a final buy

### C. Advantages to Society

- a. Customers need not to travel to shop a product thus less traffic on road and low air pollution.
- b. E-Commerce helps reducing cost of products so less affluent people can also afford the products.
- c. E-Commerce has enabled access to services and products to rural areas as well which are otherwise not available to them.
- d. E-Commerce helps government to deliver public services like health care, education, social services at reduced cost and in improved way.

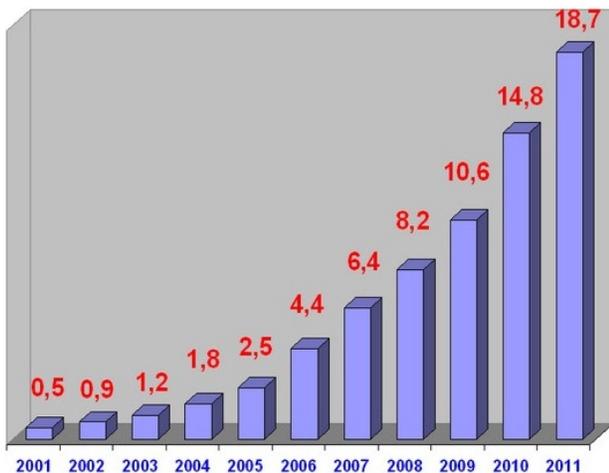


figure3:Selective growth of e-commerce

## VII. SECURE E-COMMERCE GUIDELINES

### A. Cookies and History

Online merchants as well as other sites watch our shopping and surfing habits by using "cookies," an

online tracking system that attaches pieces of code to our Internet browsers to track which sites we visit as we search the Web. "Persistent" cookies remain stored on your computer while "session" cookies expire when you turn the browser off. Online merchants use cookies to recognize you and speed up the shopping process the next time you visit.

You may be able to set your browser to disable or refuse cookies but the tradeoff may limit the functions you can perform online, and possibly prevent you from ordering online.

### B. Credit/ debit card

The safest way to shop on the Internet is with a *credit card*. In the event something goes wrong, you are protected under the federal Fair Credit Billing Act. You have the right to dispute charges on your credit card, and you can withhold payments during a creditor investigation. Companies that use negative option plans must (1) clearly and conspicuously disclose the material terms of the transaction before obtaining the consumer's billing information, (2) obtain a consumer's express consent before charging the consumer, and (3) provide a simple mechanism to stop any recurring charges. Online shopping by *check* leaves you vulnerable to bank fraud. And sending a cashier's check or money order doesn't give you any protection if you have problems with the purchase. Never pay for online purchases by using a *money transfer service*

### C. Identity Theft

As online shopping becomes more common, there will be more cases of identity theft committed over the Internet. Be aware of who you are buying from. And use *true* credit cards for purchases, not debit cards. Check your credit card bills carefully for several months after purchasing on the Internet. Look for purchases you did not make. Order your credit reports at least once a year and check for accounts that have been opened without your permission.

## VIII. DISADVANTAGES OF E-COMMERCE

E-Commerce disadvantages can be broadly classified in two major categories:

### A. Technical disadvantages

- a. There can be lack of system security, reliability or standards owing to poor implementation of e-Commerce.

- b. Sometimes, it becomes difficult to integrate E-Commerce software or website with the existing application or databases.
  - c. There could be software/hardware compatibility issue as some E-Commerce software.
- B. Non-Technical disadvantages
- a. Initial cost: The cost of creating / building E-Commerce application in-house may be very high. There could be delay in launching the E-Commerce application due to mistakes, lack of experience.
  - b. User resistance: User may not trust the site being unknown faceless seller. Such mistrust makes it difficult to make user switch from physical stores to online/virtual stores.
  - c. Lack of touch or feel of products during online shopping.
  - d. Security/ Privacy: Difficult to ensure security or privacy on online transactions

## IX. FUTURE SCOPE

The E-commerce is dynamically based we can also add further more facilities.

To improve the module in future point of view we can further add:-

### A. Personalization and appealing to the consumer

As highlighted by research, many consumers expect to have the same personal experience shopping online as they do shopping in-store, and they expect the same convenience and speed of shopping in-store as they do shopping online.

### B. Product-discovery sites and recommendation engines

To answer the problems of competition in the now-diluted space, successful retailers have begun to incorporate a "guided discovery" process that targets specific items for a

### C. Emotion-driven shopping experiences

The ability for users to share their dream shopping lists with friends for example, is just one way of creating a more personalized, online community. These wish lists are an extremely simple way for users to see what friends and family are shopping for, allowing them to save the products they find and share them with others to get exactly what they want, or know exactly what others are looking for.

## X. CONCLUSION

Day by day E-commerce is playing very good role in online retail marketing and peoples using this technology day by day increasing all over the world. This paper deals the conceptual

knowledge of search engine marketing or e-commerce, literature review, current and future aspects of e-commerce in Indian context. With the rapid expansion of internet, Ecommerce, is set to play a very important role in the 21st century, the new opportunities that will be thrown open, will be accessible to both large corporations and small companies.

The successful companies of the future will be those that take e-commerce seriously, dedicating sufficient resources to its development. E-commerce is not an IT issue but a whole business undertaking. Companies that use it as a reason for completely re-designing their business processes are likely to reap the greatest benefits.

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