

## E-commerce in India: Opportunities and Challenges

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### Abstract

Electronic commerce (E-commerce) has changed the way business is conducted. In the era of globalization and liberalization e-commerce has emerged as the boundary-less medium of trade. The amount of trade conducted electronically has grown extraordinarily with widespread Internet usage. The ample opportunities and benefits provided by e-commerce have made it the obvious choice for many. However the right commercial and legal environment is crucial to this form of trade conducted over invisible national barriers. Consumer and merchant interests have to be protected without infringing too much on their freedom of operation. E-commerce industry in India is growing. If Indian companies are to compete in international markets, they cannot ignore e-commerce. The future of E-commerce in India is very bright. While many companies and organisations are beginning to take advantages of potential of E-commerce still there are some critical challenges which need to be overcome before E-commerce would become successful medium of trade in India. This paper provides an overview about E-commerce and its growth vis-à-vis Indian market. Further, it analyses the associated challenges and opportunities.

**Keywords:** E-commerce, Market, India

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### Introduction

Information and communication technology has revolutionized the way businesses are conducted. In the era of globalization this transition from 'brick and mortar' system of trading to 'click' system of trading is considered crucial. The pervasiveness of Internet technology, readily available solutions and the repeatedly demonstrated benefits of electronic technology have fuelled the use of e-commerce among people today. E-commerce has accelerated the pace with which business can be transacted today. It has forced all the businesses to re-examine their practices. It provides ample opportunities in form of e-learning, e-tailing, e-payment, e-insurance, e-commerce education integration etc. E-commerce is used everywhere in everyday life. It ranges

from credit card authorization , travel reservations , wire fund transfers , electronic banking , fund raising , political campaigning , auctioneering , to arranging for wedding. Its growing importance is in relation to the advantages attached to it which are : low cost , economical , higher margins , better and quicker services ,easy comparison shopping , creation of knowledge markets , information sharing , convenience and customization. Even though long list of benefits can be generated there are still problems and drawbacks to be considered before plunging into this new form of commerce. Some of the problems relating to e-commerce are: security issues, concerns about data protection, delivery problems, customer relations problems, web site access by the competitors. Security cost of installation and legal issues are critical among them.

### Electronic commerce

E-commerce is considered to be the buying and selling of information, products, and services via electronic systems such as the internet and other computer networks. The term e-commerce was originally conceived to describe the process of conducting business transactions electronically using technology from the Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT). These technologies, which first appeared in the late 1970's, allowed for the exchange of information and the execution of electronic transactions between businesses, typically in the form of electronic purchase orders and invoices. EDI and EFT were the enabling technologies that laid the groundwork for what we now know as e-commerce.

With the popularity of internet, internet commerce gained its momentum but internet commerce is just one part of e-commerce. E-commerce can be divided into 3 categories based on their application type:

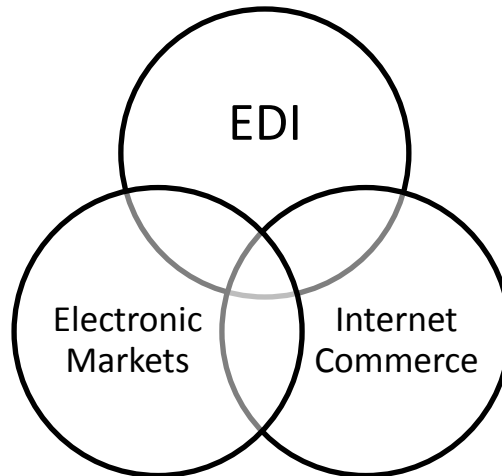


Fig 1: The three categories of e-commerce

*Electronic Markets:* It involves the use of information and communication technology to provide wide range of products and services. Online railway booking system is one such example of electronic markets.

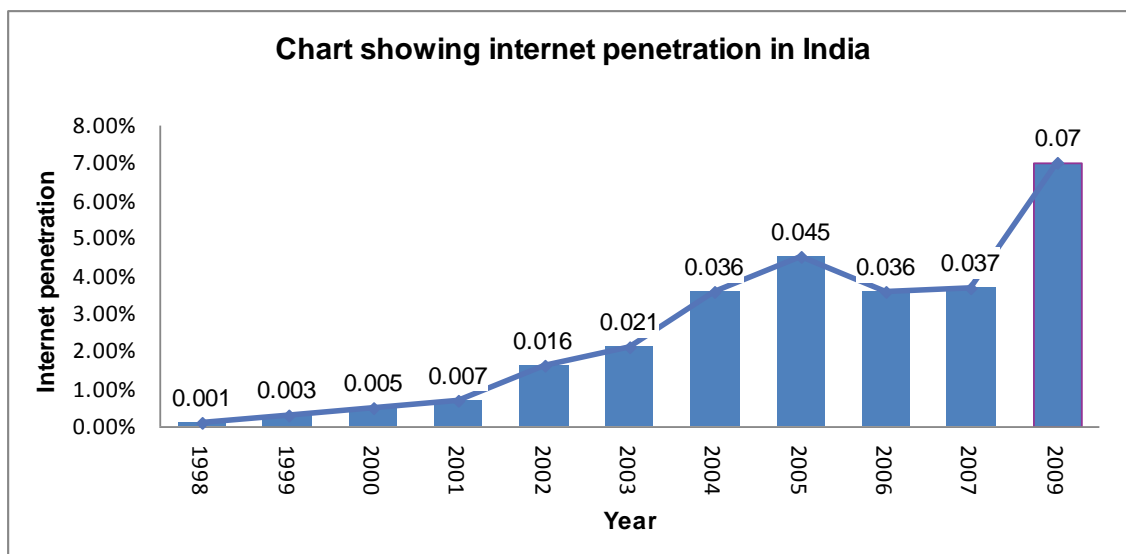
*Electronic Data Interchange:* E-commerce really began as Electronic Data Interchange (EDI), the application-to-application transfer of business documents between computers. Facilitated by private networks called VANs (Value Added Networks) or through the internet many companies use EDI to exchange business documents. It eliminates the need for sending paper documents via mail or faxes.

*Internet Commerce:* Information and communications technologies are also used for marketing and sale of goods and services. This type of e-commerce is typified by the commercial use of the internet. So internet commerce consists of the buying and selling of products or services over the Internet .It is to be noted that internet is just one of the networks being used in the process but it is not the only one. Electronic commerce can be conducted even on private networks like VAN and LAN (Local Area Network)

### **E-commerce and Internet**

The internet allows people from all over the world to get connected inexpensively and reliably. It provides opportunities to businesses to showcase and sell their products and services online and gives potential customers, prospects, and business partners access to information about these businesses and their products and services that would lead to purchase. Young Jun Choi<sup>1</sup>, Chung Suk Suh (2005) reported that the development of the internet in the 20th century led to the birth of an electronic marketplace (e-marketplace), which is now a kernel of e-commerce. However e-commerce is older than the internet. Originally, e-commerce meant the facilitation of commercial transactions electronically; using technology such as EDI and EFT. However, installing and maintaining private networks was very expensive. In the last few years internet has given another boost to e-commerce because it is a low-cost alternative to proprietary networks.

The ever-increasing use of internet among the people is considered to be one of the prime drivers of e-commerce in India. The amount of trade conducted electronically has grown extraordinarily with widespread internet usage. With benefits like ease of global reach, low marketing cost, low barriers to entry internet has accelerated the growth of e-commerce market worldwide. Internet adoption continues to grow even in India. According to the Internet & Mobile Association of India (IAMAI) the low cost of broadband has helped increase internet usage. The chart given below shows how internet penetration in India has increased over a period of time.



Data source: [www.internetworldstats.com](http://www.internetworldstats.com)

### Growth of E-commerce market in India

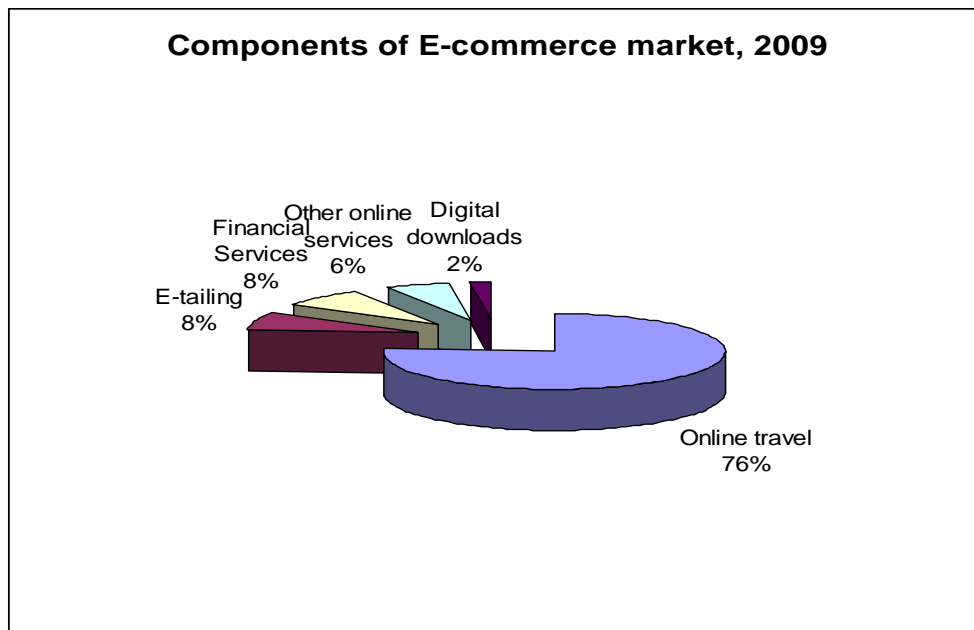
Since the introduction of E-commerce there has been debate on future of its prospects in India. But India is showing tremendous growth in this regard. The low cost of the Personal computer (PC) and the growing use of the Internet are considered to be the major causes for that. More and more companies in India are facilitating transactions over the Web. Some of the policies of the government are also contributing to the promotion of e-commerce in India For promotion and propagation of EDI and E - commerce, EDI Council of India, EDIFACT Committee and EDI working group have been set up. Today E -commerce is a by-word in Indian society and it has become an integral part of peoples' daily life. There are Websites providing any number of goods and services on-line. Then there are those, which provide a specific product along with its allied services. Some internet portals provide almost all categories of goods and services in a single site; hence, they are targeting buyers of every possible product/service. The most popular examples are [www.indiaplaza.com](http://www.indiaplaza.com), [www.thebestofindia.com](http://www.thebestofindia.com), [www.khoj.com](http://www.khoj.com), [www.sify.com](http://www.sify.com), [www.rediff.com](http://www.rediff.com), [www.indiatimes.com](http://www.indiatimes.com) and so on. These Indian e-commerce portals provide goods and services in a variety of categories. On the other hand there are some Indian portals/websites which deal in a specialized field as listed in the table below:

<i>Products / Services</i>	<i>Associated Websites</i>
Automobiles	<a href="http://www.indiacar.com/">http://www.indiacar.com/</a>
Stocks and shares	<a href="http://www.equitymaster.com/">http://www.equitymaster.com/</a>
Real estate	<a href="http://www.indiaproperities.com/">http://www.indiaproperities.com/</a>
Travel and Tourism	<a href="http://www.tourisminindia.com/">http://www.tourisminindia.com/</a>
Gifts	<a href="http://www.indiangiftsportal.com/">http://www.indiangiftsportal.com/</a>
Hobbies	<a href="http://www.firstandsecond.com/">http://www.firstandsecond.com/</a>

Matrimony	<a href="http://www.jeevansathi.com/">http://www.jeevansathi.com/</a>
Employment	<a href="http://www.monsterindia.com/">http://www.monsterindia.com/</a>

As per reports released by the Internet and Mobile Association of India (IAMAI) Indian E-commerce industry has grown from ₹ 8,146 crore in the year 2007 to ₹ 19,688 crore by the end of 2009. By the end of 2011, the net commerce market size is expected to touch ₹ 46,520 crore. This growth is primarily attributed to the on-line travel industry, which contributes significantly to the total net commerce industry in India today; the online travel market, which includes booking of rail and air tickets, hotel accommodations and tour packages, is estimated to grow by 50 per cent and touch ₹ 37,890 crore by December, 2011.

Out of the total market size of ₹ 19,688 crore (in the year 2009), the share of on-line travel industry was 76%.E-tailing and transactions relating to different financial services constituted a share of 8% each. Digital downloads and other online services such as classifieds (jobs, matrimonial, cars real estate and others), online food delivery as well as buying movie tickets and DVD rentals comprised 2% and 6% of total share. All this information has been depicted through a pie-chart given below:



Source : [www.iamai.in](http://www.iamai.in)

### E-Commerce opportunities

Following are some of the areas where e-commerce growth has been witnessed over a period of time:

- 1) **Banking:** Many banks are providing the facility of e-banking .It involves combination of electronic technology with the banking sector..E-banking is truly a big milestone for the banking industry. With the passage of time, lots of banks

have realized the competition brought forth with this new technology and are adapting to this change. In India private sector banks and foreign banks have been early adopters of e-banking. ICICI Bank and HDFC Bank have taken a lead in introducing e-banking in India. ICICI Bank is the first one to have introduced Internet banking for a limited range of services such as access to account information; correspondence for the first time in 1996. After ICICI, Citibank, IndusInd Bank and HDFC Bank were the early ones to adopt the technology in 1999. The introduction of Automated Teller Machines (ATMs), Electronic Funds Transfer (EFT), plastic cards and home banking has provided a boost to e-banking in India.

- 2) *Stock trading:* By opening a dematerialised (demat) account with banks it's even possible to go for investment in stock markets. With a click of mouse, a person can make investments in securities of a company by operating through demat account.
- 3) *Travel industry:* Tour and traveling industry has adapted itself rapidly to e-commerce system. Online reservation for railways and airline has provided great relief to customers in form of time and respective sectors in form of cost. Online travel industry in India has grown from ₹ 6,250 crore in year 2007 to ₹ 14,953 crore in the year 2009. The restrained growth in 2009 was due to the overall slowdown in the industry. It is expected that this industry will grow at a much higher rates in the coming few years.
- 4) *E-tailing:* E-tailing is emerging as an attractive alternative to the traditional brick-and-mortar retailing. An E-tailer can go global and location is no longer a problem. An e-tailer has to virtually attract a customer to his site and offer him exemplary services. Due to increased e-commerce initiatives and awareness by brands, e-tailing has experienced decent growth. in India
- 5) *Financial services:* Various financial services like insurance payment and renewal have emerged as benefits of e-commerce. Financial services market was estimated to be ₹ 1,540 crore in the year 2009.
- 6) *Education:* E-learning is one of the best advantages brought forth with the development of e-commerce. Diana Oblinger (2001) reported that education and continuous learning have become so vital in all societies that the demand for distance and open learning will increase. This phenomenon has been witnessed in India also. E-learning or electronic learning in India is gaining prominence slowly, but indeed steadily. Many reputed institutes like Indian Institute of Management, Indian Institute of Technology, Indian Institute of Foreign Trade are today offering e-learning courses. Some e-learning portals in India are also conducting mock tests for various competitive examinations like engineering, medical, management etc.

### Issues relating to E-commerce in India

E-commerce presents a world of opportunity for doing businesses, reaching global markets and purchasing without leaving the home or office. E-commerce can provide opportunities to improve business processes, just as phones, faxes and mobile communications have in the past. Despite this there are some issues and challenges that continue to thwart the expansion of e-commerce in India. It's important to understand the legal issues and potential risks to ensure a safe, secure environment for trading with customers and other businesses. Some of major issues impairing growth of e-commerce are: privacy and security, electronic payments, legislation dilemma, lack of interoperability.

Privacy and security has been and continues to be a significant issue of concern for both current and prospective electronic commerce. Over the years with popularity of e-commerce even the online frauds and thefts have increased. Some of the common ways of online frauds are : phishing (the criminally fraudulent process of attempting to acquire sensitive information such as usernames, passwords and credit card details by masquerading as a trustworthy entity in an electronic communication) , computer viruses (A computer virus is a computer program that can copy itself and infect a computer without permission or knowledge of the user) , spamming (Spamming is nothing but sending unsolicited bulk and/or commercial messages over the internet to various users across the globe) , spy ware ( a computer software that is installed surreptitiously on user computer to intercept or take partial control over the user's interaction with the computer, without the user's informed consent), internet theft etc. Electronic payment system also needs to evolve for the growth of e-commerce as it is an integral part of the mercantile process. Some of the biggest downsides of e-payments are the lack of authentication, repudiation of charges and credit card fraud.

There is need to develop a secure, reliable, efficient and unobtrusive e-payment system. Legislation dilemma is also one of the important concerns of e-commerce. If you buy a product online, from a vendor on the other side of the world, perhaps through a dealer based in yet a third country, then your rights is a lot less clear. Which country's protection laws apply: yours, those in the vendor's home country, or those of the intermediary? Without knowing which particular set of laws apply, it's impossible to know whom to sue. When a transaction that takes place between two different parties located in two different countries goes wrong then a number of complex questions arise.

Companies have problems sharing the orders and information collected on the WWW with the rest of their business applications. This is due to differences in technologies deployed in different companies, and resulting lack of interoperability. A major concern is EDI software incompatibility. If your company wants to establish a business-to-business relationship with another company, then both companies must run the same software. This is a big problem, since a company might have to buy two or more

different EDI software products to do business with other companies. Interoperability is widely regarded as one of the most critical and urgent issues for the future development and growth of e-commerce. E-commerce site development, its advertising, electronic transaction, money transactions and such involve many legal issues, which also need to be taken into account step by step. The other challenge confronting e-commerce is question of ethics .There are several threats to ethics: faster computers and advanced networks, massive distributed databases, ease of access to information, transparency of software.

### Steps to promote E-commerce in India

There are number of challenges which need to be addressed for e-commerce to take off. First and foremost, the suppliers or vendors must improve their technology and fulfillment processes. For customers to trust this channel, they must see consistency in execution. The critical step in making this happen is for the online retailers to tightly integrate their systems with the backend fulfillment vendors. Good quality of products and services need to be provided to ensure there is better trust in e-commerce channel as a whole.

The government must do more to make policies relating to the strengthening of E-businesses. In India government is aware of the increasing misuse of the electronic media and online frauds. Therefore, the Government of India has enacted the Information and Technology Act, 2000 to keep a check on the transactions carried on via the electronic media and to make the process of E-commerce safe and reliable. But still there is a need for more stringent laws and regulations. Also there should be recourse available to customers who are victims of on-line fraud or bad trade practices that are polluting the on-line environment.

### Conclusion

Electronic commerce has redefined the nature of the enterprises' interface with customers and markets. No doubt e-commerce is spreading at a mind-boggling rate. It is believed that it is going to take over a lot of traditional business methods. With the commercialization and popularization of the internet, e-commerce has assumed new proportion. It has provided customers and enterprises with plenty of benefits .But as with any new technology it also has its share of limitations which need to be tackled before we can reap the associated benefits.

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