



AN ANALYTICAL STUDY OF E-COMMERCE IN INDIA

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Abstract

E-Commerce or E-Business is the largest application of computers and information technology in keeping and managing business and financial records. It helps in transaction of any amount of money from any part of the world to other. We can purchase anything online with the help of debit and credit cards. Application of e-commerce are billing to customers, tracing payments received and payments to be made and tracing supplies needed and items produced, stored, shipped, and sold, etc..

Keywords: E-commerce, B2C, Flipkart, sales penetration

1. Introduction

E-Commerce is the process of doing business online. Or we can say that E-commerce is to conduct business by using the IT Information technology, i.e., computer technology and electronic communication. It is the buying and selling of items or goods or services on the

Web using electronic communication and digital information processing technology. EDI or

Electronic Data Interchange is an early form of e-commerce. Its high cost, use of proprietary standards etc. E-commerce is the process of doing business electronic. It changes the entire business scenario due to the powerful innovation of Internet, which is spreading fast through the world. The power of Internet as a global access was felt with the introduction of the World Wide Web (WWW) in 1994. This global network makes global relations with the companies made easier. It is predicted that, in the near future the digital economy will overtake the traditional economy of all developed countries. E-commerce is a composite of technologies process and business strategies that foster the instant exchange of information within and between organization. E-commerce strengthens relationship with buyers & make it easier to attract new customer, improves customer responsiveness and open new markets on a global scale. E-commerce is the application of various communication technologies to provide the automated exchange of business information with internal and external customer, suppliers and financial institution

E-commerce business in India has seen exponential growth over the last decade. This growth is due to many contributory factors, including rapid adoption of technology by Indian consumers, large increases in the number of internet users, new enabling technologies, innovative business models and alternative payment options offered by E-commerce companies. Moreover, the high growth in E-commerce continues unabated, with the sector expecting to witness a steep increase in revenues in the coming years. The E-commerce industry was worth 12.9 billion US \$ in 2015 grew at a CAGR of 42%, and is estimated to become 38.09 billion US Dollar by 2020

1.1. Importance of E-commerce

Through, E-commerce, operating efficiency of the business firm will definitely improve and which in turn strengthen the value and service given to customers and provide a competitive edge over competitors. These improvements may result in more effective performance. The direct benefit accrue to an organization on practicing e-commerce are better quality, greater customer satisfaction, better decision making, low cost, high speed and real time interaction. More specifically e-commerce enables executing of information relating to the transaction between two or more using interconnected networks. From the business perspective with less time spent during each transaction, more transaction can be achieved on the same day. As for the consumer, they will save up more time during their transaction. Because of this, E-commerce steps in and replaced the traditional commerce method where a single transaction can cost both parties a lot of valuable time. E-commerce is the most cost effective compared to traditional commerce method. This is due to the fact where through e-commerce, the cost for the middleperson to sell their products can be saved and diverted top another aspect of their business. For e-commerce, the total overheads needed to run the business is significantly much less compared to the traditional commerce method. The reason due to that is where most of the cost can be reduced in Ecommerce. To both the consumers and business, connectivity plays an important part as it is the key factor determining the whole business. From the business point of view, E-commerce provides better connectivity for its potential customer as their respective website can be accessed virtually from anywhere through the Internet. This way, more potential customers can get in touch with the company's business and thus, eliminating the limits of geographical location. From the customer's standpoint, E-commerce is much more convenient as they can browse through a whole directories of catalogues without any hassle, compare prices between products, buying from another country and on top of that, they can do it while at home or at work, without any necessity to move a single inch from their chair. Besides that for both consumers and business, commerce proves to be more convenient as online trading has less red tape compared to traditional commerce method. Ecommerce itself gives a boost to the global market. In short, if without any major obstacles, E-commerce will certainly continue to mature in the global; market and eventually, it will become an essential business plan for a company in order to survive and stay competitive in the ever changing market. E-commerce business have numerous advantages over off line retail locations and catalog operators consumers browsing online stores can easily search to find exactly what they are looking for while shopping and can easily comparison of shop with just a few clicks of the mouse. Even the smallest online retail sites can sell products and turn a profit with a very simple online presence. Web tracking technology allows e-commerce sites to closely track customer preferences and deliver highly individualized marketing to their entire customer base.

1.2. Recent trends in E-commerce

- Industry studies by IAMAI show that online travel dominates the e-commerce industry in India with 70% of the market share.
- Online retailer major categories include smartphones, laptops, cameras, books, computers, clothes, home and kitchen appliances, toys, and gifts.
- Promotion of products, recruitment through social media, the pattern of advertisement by corporate sector etc are made online.
- Changes the lifestyle of Indian consumers by seeking convenience, comfort and variety.

1.3. Impacts of E-commerce in Society

The introduction of e-commerce has impacted on the traditional means of online exchanges. It is creating a new market place and opportunities for the reorganization of economic processes, in a more efficient way. The open structure of the Internet and the low cost of using it permit the interconnection of new and existing information and communication technologies. It offers businesses and consumers an innovative and powerful information system and another form of communication. This changes the way they search and consumer products, with these products increasingly customized, distributed and exchanged differently. The advent of ecommerce has seen a dramatic impact on the traditional ways of doing business. It has brought producers and consumers closer together and eradicated many of the costs previously encountered. It is evident that the supply industry will benefit from e-commerce which includes those producing computers, networking equipment and the software necessary

It has affected the following fields of economic activity.

- Pricing of the product.
- Product availability
- The transportation patterns
- Transaction costs.
- Cost and profit structure of all companies.
- Consumer behaviour in developed economies & worldwide competitiveness.

1.4. Economic, behavioural changes

The changes that B2C e-commerce has sparked arguably have had a more significant impact on the economy and on buyers' behaviour than has B2B e-commerce. In the past, when consumers wanted to make purchases they had to set aside time to shop during certain hours of the day, or they had to read through catalogs sent to them by mail-order houses. Today, many consumers can simply use their computers— and now smart phones or other portable electronic devices—to shop online. Buyers and sellers that engage in e-commerce retail trade are no longer restricted by store hours, geographic marketing areas, or catalog mailing lists. With a few simple clicks they can gain access to a variety of goods 24 hours a day, seven days a week. The characteristics of retail e-commerce merchandise also have changed significantly over the past decade. Back in 2000, computer hardware was the most common type of merchandise sold over the Internet. Today, the variety of merchandise is extremely diverse, and shoppers can buy almost anything online.

Online shoppers have benefited in other ways. The growth of e-commerce retail sales has reduced consumers' search cost, placed downward pressure on many consumer prices, and reduced price dispersion for many consumer goods. But this has led to a substantial decrease in the number of small companies operating in certain industries, as they tend to be less involved with e-commerce. Larger businesses, most notably retail book outlets, new automobile dealerships, and travel agents, are better able to compete in this new market environment.

The extremely rapid growth of e-commerce retail sales has provided a major boost to residential parcel delivery services. That's because online merchandise purchases involve some form of residential delivery by a third-party vendor such as FedEx, UPS, or the U.S. Postal Service. In addition, there appear to be considerable synergies related to B2C parcel and heavier freight volumes—parcel industry insiders have observed that businesses with strong e-commerce related B2C parcel shipment volumes often have stronger B2B shipment volumes than those that do not engage in B2C e-commerce.

1.5. E-commerce influences demand patterns

As technology, e-commerce, and globalization become more intertwined, buyers and sellers are increasing their connectivity and the speed with which they conduct sales transactions. As we saw during the recent turmoil in the financial markets and some supply chain networks, speeding up sales transactions can be a very positive attribute when small market corrections are taking place. However, during a major economic correction like the one we witnessed during the Great Recession, a quicker response to sales transactions can have cascading impacts on supply chains, resulting in large contractions or expansions in orders, production, shipments, and inventory. That's because years ago, it might have taken two years for events in one country to affect another's economy. Now, thanks to technology and instant communication, the impact can be almost immediate. Thus, there are some potentially negative consequences to the rapid growth of e-commerce. In this volatile business environment, supply chain managers should consider developing strategies for dealing with the rapid swings that can result from increasing use of e-commerce in a globalized market.

II. Objectives of the study

1. To study the present status of e-commerce on Indian economy.
2. To study the importance and contribution of e-commerce.
3. To understand the challenges of e-commerce in India

III. Research Methodology

This research is based on secondary data which are collected from several sources i.e. research papers, www.statista, publications from Ministry Of Commerce, Govt. of India etc which is available on the internet

IV. Analysis of Data

Table 1: Present Market segments of E-commerce

Category	Specification
Digital population as of January 2020	687.6 million
E-commerce market size by 2027	200 Billion USD
Active E-commerce penetration	74%
E-commerce share in retail by 2021	7 %
Share of online shoppers who prefer mobile wallets	32%
Category of online retail with the highest penetration rate	Electronics
Flipkart revenue	436.15 Billion INR
Most popular e-payment service	Paytm

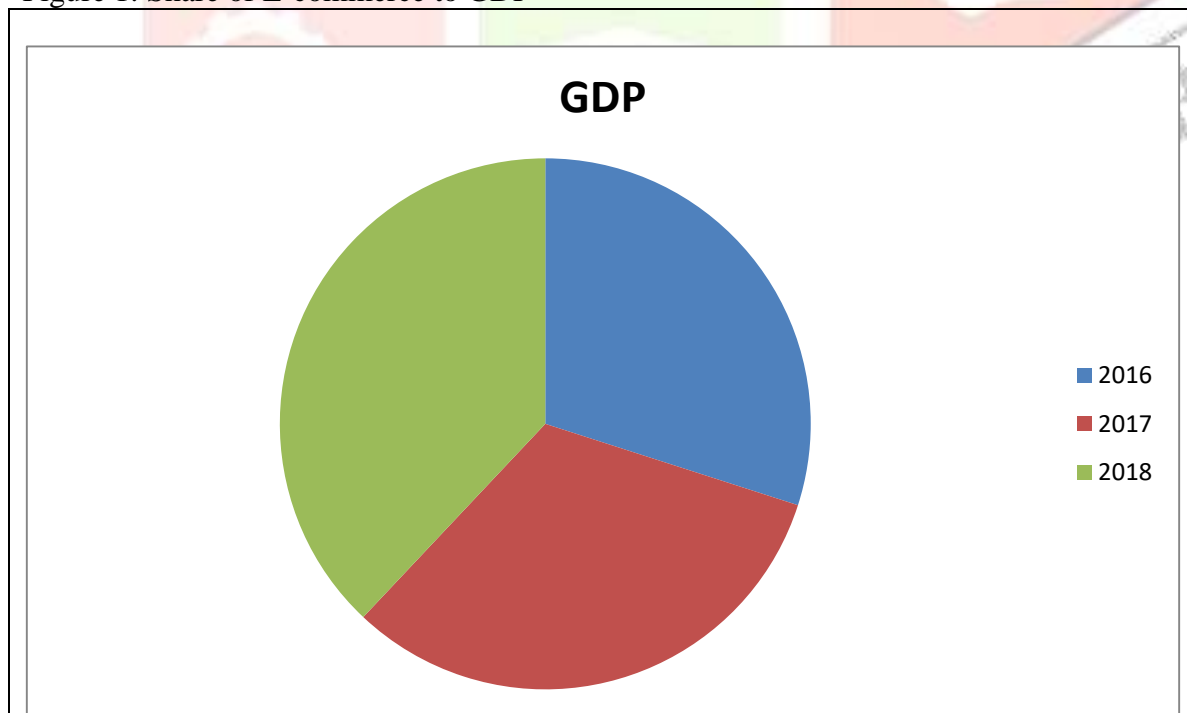
Statista 2020

Table 2: Share of E-commerce to GDP

Year	GDP
2016	0.71
2017	0.76
2018	0.9

Statista2020, EPW March 2019

Figure 1: Share of E-commerce to GDP



Ecommerce made up about 0.76 % of India's GDP in 2017. This was estimated 0.9 percent in 2018. By being the second largest online market in the world after china, the country's rapid growth in the digital sphere

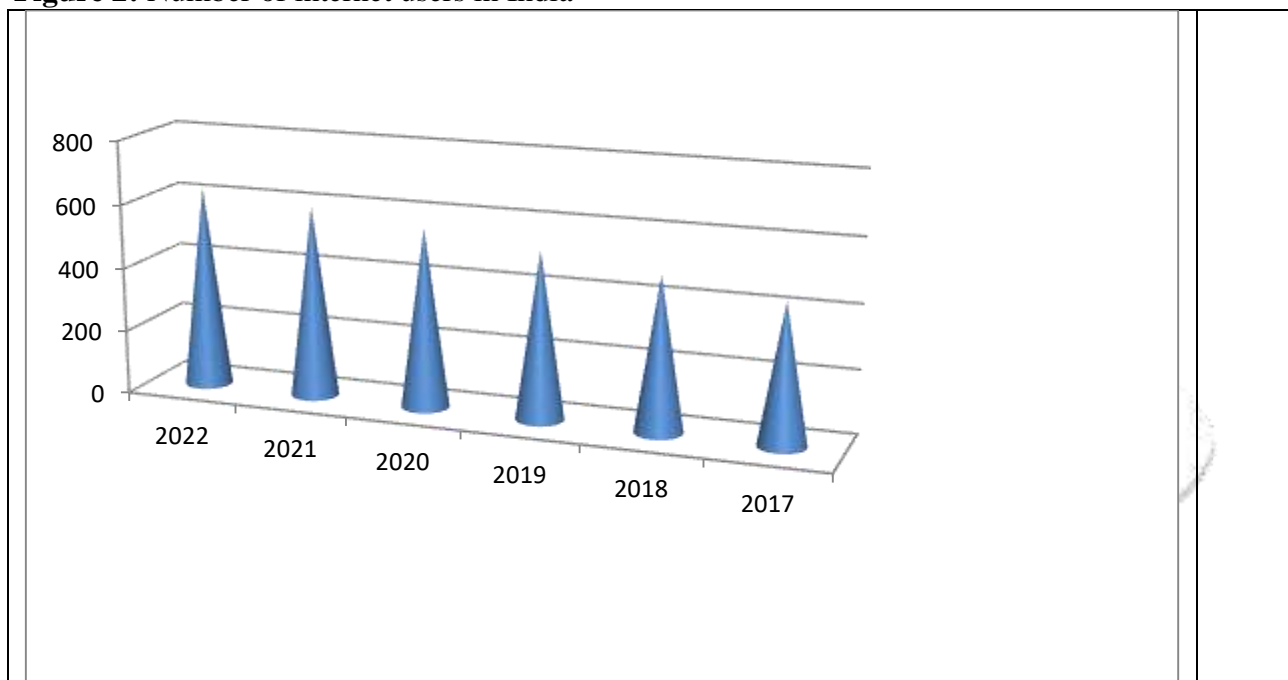
V. Internet users in India

Table 3: Number of internet users in India from 2016 to 2018 with a forecast until 2023

Year	No of internet Users
2023	660
2022	634
2021	601
2020	564.5
2019	525
2018	483
2017	437.4
2016	295.39

Statista 2020

Figure 2: Number of internet users in India

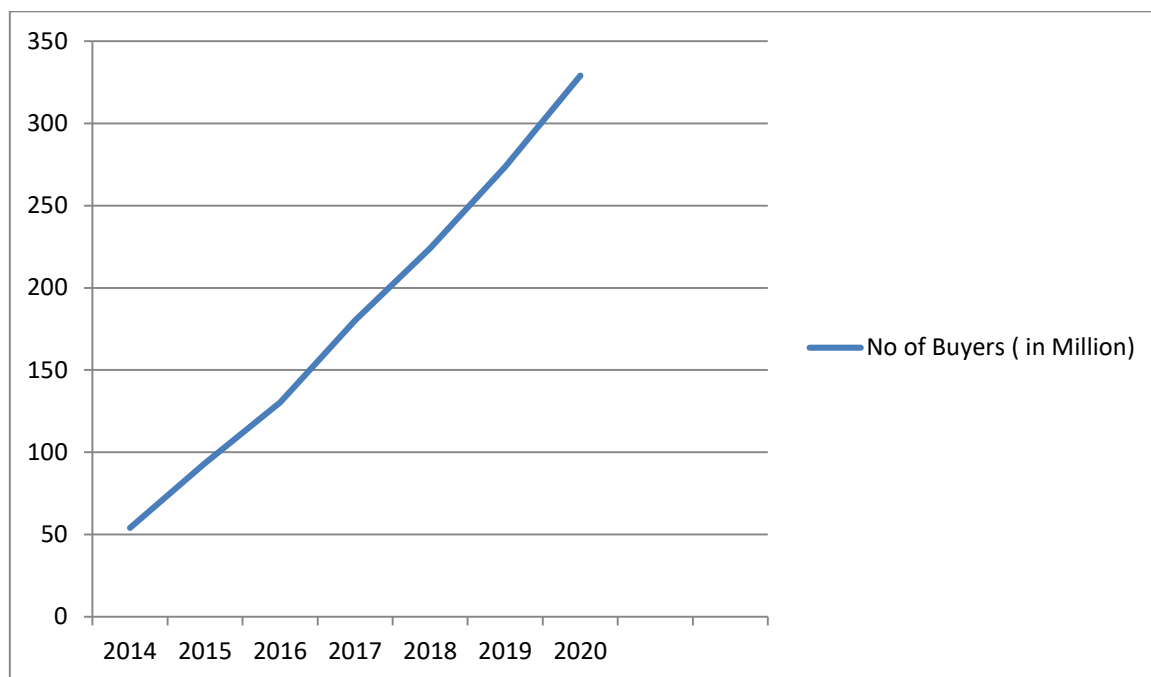


India had over 480 million internet users in the year 2018 across the country. This figure was projected to grow to over 660 million users by 2023 indicating a big market potential in internet services for the South Asian. In fact India was ranked as the second largest online market worldwide in India

Table 4: Digital buyers in India 2014-20 (In Millions)

Year	No of Buyers
2014	54.1
2015	93.4
2016	130.4
2017	180.1
2018	224.1
2019	273.6
2020	330

Figure 3: Digital buyers in India 2014-20



The e-commerce sector has seen a boom in the Asian region in the recent years. India, the south Asian country, had the fastest growing online retail market in 2019. The number of digital buyers across the country was estimated to be approximately 330 million in 2020. The figure suggests that almost 71 percent of internet users in the region will have purchased products online for the mentioned time period. The sector is driven by personalized advertisements, attractive discounts, quick delivery and return infrastructure and a high penetration rate of smart phones. This retail ecosystem combined with the comfort of being at home and getting all your choices delivered to your doorstep has turned the tables for the e-commerce sector quite significantly.

VI. Roots of the system

Major consumption in the sector came from the male population in the country in 2019, where Amazon was the preferred destination for scouting of products. Customized apps and experiences had their influence as well. Almost 60 percent of the citizens had used a mobile device for the purchase of goods or services in 2018.

VII. Room for further branches

Even though there has been tremendous expansion in the sector, the penetration rate in the country is relatively low compared to markets such as China and the U.S. The progress has faced challenges in the form of trust issues due to a large number of fake websites and products, which were the reason that over 20 percent of the buyers refused to, buy goods or services online in 2016. Reliable websites and quality assurance from manufacturers are tackling the issues headfirst, as they look to provide better products and services to customers and seek growth and benefits for the industry in the long run

IX. Growth of B2B E-commerce in India

The growth of the B2B E-commerce segment is relatively slower compared to the B2C Ecommerce segment in India. This is because the entry barriers in the B2B E-commerce are more than those in the B2C E-commerce industry. A B2B E-commerce company has to have a strong business model, long term logistical arrangements with rail, road and ports and also adhere to stringent regulatory and taxation laws. With an aim to tap the huge potential in the B2B Ecommerce market in India, apart from the existing B2B companies, leading B2C companies have also started to build their own platforms for small business owners and traders. This is expected to be supported by rising expectations among a growing number of companies buying and selling online and a shift to conduct procurement transactions through the Internet. Understanding this untapped potential of the B2B E-commerce industry, the Government has allowed 100% FDI in B2B E-commerce, which has enabled globally successful B2B Ecommerce companies such as Walmart and Alibaba to evince interest in the India B2B Ecommerce industry

IX. Future of E-commerce in India

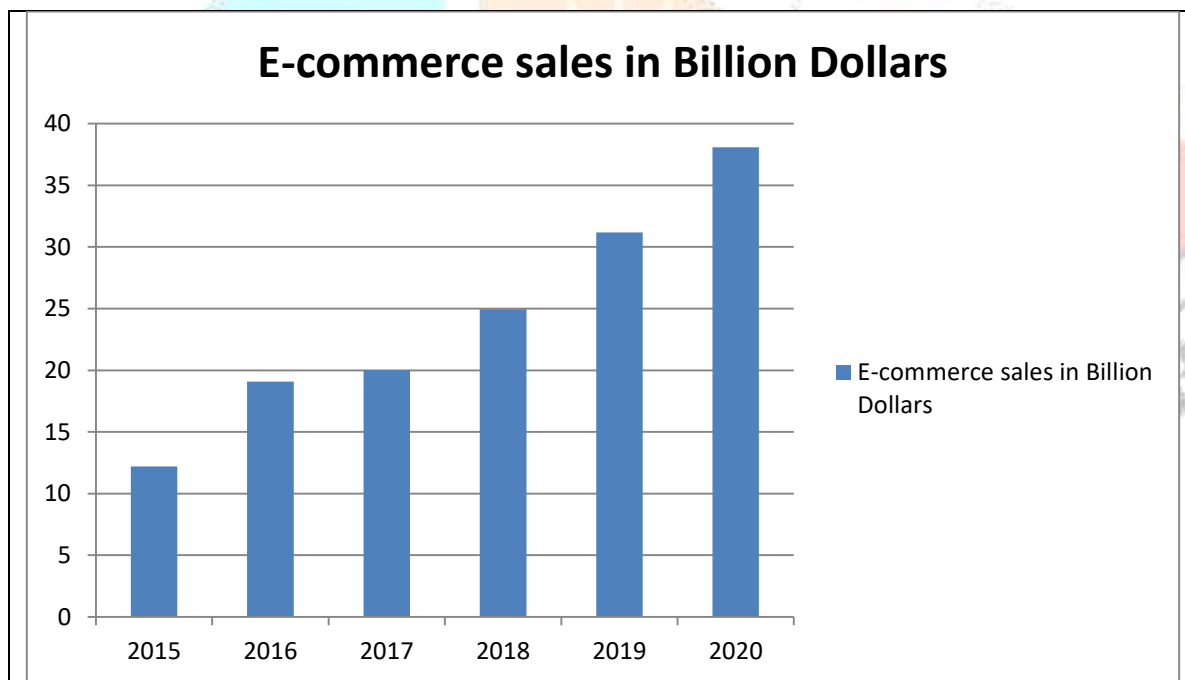
E-commerce sector in India is growing rapidly. The internet users base in India is 460 millions and it is expanding day by day. The accelerating growth of E-commerce in India is due to internet penetration and easily available smartphones. Furthermore, the favourable demographics and government effort of digitalisation is also pushing the growth of E-commerce sector in India.

Table 5: E-Commerce sales in India (In Billion Dollars)

Year	Sales
2015	12.9
2016	16.08
2017	20.01
2018	24.94
2019	31.19
2020	38.09

Statista 2020

Figure 4: E-Commerce sales in India (In Billion Dollars)



X. Challenges of E-commerce in India

E-commerce sectors have been facing multiple challenges in their business operations like taxation issues, incidents of fraud, and issues with cyber security, intense competition and preference for payment in cash (COD) by customers, inadequate infrastructure and low digital literacy. There is no uniform tax structure across various states and there is ambiguity with respect to categorization of offerings into 'goods' or 'services'. Guidelines on taxation of certain transactions like e-wallets, cash on delivery, gift vouchers etc. are not clearly defined. Some of these challenges are expected to be resolved after the implementation of the Goods and Services Tax (GST). Incidents of distribution of counterfeit goods through E-commerce platform have also been increasing which has added to the woes of both consumers as well as E-commerce companies. This is mainly because of the absence of a trustworthy mechanism which can allow consumers to authenticate sellers or their products. Data/cyber security is another major challenge faced by the players as they deal with huge volumes of customer information, a lot of which is shared with third parties such as logistics providers raising concerns about exploitation by external entities. Another challenge is payment by customers in cash. Receiving payment in cash (COD) makes the process laborious, risky and more expensive for the companies as their working capital requirement increases. Higher

return ratio for goods sold online is also proving expensive and presenting challenges for companies. Incidentally, return percentage of orders in COD is much higher compared to online payments. The E-commerce industry in India has seen intensified competition in the sector, which in turn has forced companies to adopt aggressive pricing policies, offering heavy discounts to customers and high commissions to vendors and other parties. This has exerted a lot of pressure on the profitability of the companies.

As far as e-commerce is concerned it is still in an infancy stage in India. The environment exist today is not much suitable for the fast growth of e-commerce. We can list out the important challenges one by one as follows

1. One of the important challenges faced by this sector is the lack of adequate infrastructure for IT technology and Internet. The penetration of personal computers in India is as low as 3.5 per thousand of population compared to over 6 per thousand in China and 500 per thousand in USA.
2. Another important reason for not developing e-commerce is the high tariff rate charged by Internet Service Providers [ISPs] Speed and connectivity is also poor.
3. Another problem faced is that e-commerce sites are one of the favourite targets of hackers.
4. the most serious drawback is the absence of effective cyber law at the moment.
- 5-commerce is governed by the UNCITRAL model code, but this is not binding on any country. It is expected that all WTO member countries will soon enact laws to govern
6. The reason low growth of e-commerce is the privacy and security issues. Measures like digital signatures, Digital certificates, and fire walls can be adopted to secure safety and protection over the message passed on internet.
7. Payment related problems also continue to block the e-commerce activities. Electronic cash, credit cards etc. are some of the popular payment method used for e-commerce transactions. But unfortunately penetration of e-cash and credit cards not only low, but Indian consumers are suspicious about the threat of fraud played by unscrupulous hackers. In order to minimize this problem, experts suggest the use of digital certificate along with credit card to secure their payment activities.
8. Electronic commerce is also characterized by some technological and inherent limitations which have restricted the number of people using this revolutionary system.

Conclusion

After taking a complete view of the industry trends, it is seen e-commerce is emerging as an important tool to certify exploding growth of Indian economy. It has the scope to lead India into an Economic superpower. With a rapidly growing internet penetration e-commerce offers an attractive option for the retailers to expand. To achieve this, there should be more investments in supporting infrastructure and innovative and game changing business models in India

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