

E-COMMERCE IN INDIA

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Abstract:

E-commerce stands for electronic commerce where business transactions are carried out using telecommunication means, mainly by using internet. E-commerce is not only a way to support existing business operations, but it has brought a paradigm shift in the world for trading. Growing penetration of technology and acceptance of idea of virtual shopping has led to derive e-commerce eco-system. With the deployment of internet connection, 3G and 4G telecommunication services, broadband, laptop, smartphones, tablets acceptance of e-commerce is increasing. The e-commerce story will surely witness a new world of digitalization. The objective of this study is to highlight the growth of e-commerce in India, issues in e-commerce, major players in Indian e-commerce market, analysis the present trends of e-commerce and examines the future of e-commerce in India in terms of challenges and opportunities. For the purpose of the study secondary data has been used including available research papers, articles, journals, reports etc.

Therefore, future of e-commerce is tremendous where many new players are entering the market in different sectors and government is taking various steps to help the traders to expand their horizons and to protect the basic rights such as privacy, prevention of fraud, intellectual property, etc.

Keywords:

E-commerce, Internet, technology, security, cloud computing.



Introduction:

With the emergence of internet and its commercialization, a new form of commerce which is popularly known as “E-Commerce” has emerged in modern global economy. E-commerce is the use of internet and other networking technologies for conducting business transactions. Unlike physical exchange or direct physical contact such kind of business encourages business transactions electronically. Further e-commerce not only involve buying and selling but it also involve other activities like web promotion of products and services, invoicing and payment online, dealing with customers queries online etc. Technologies that are normally used for e-commerce include Electronic data interchange (EDI), electronic catalogue, electronic form, finance and banking technology, electronic payment systems like smart card, fund transfer, digital cash etc. Therefore, e-commerce include wide range of activates and applications. Based on type of application e-commerce can be classified into following categories:

- **Business to Customers (B2C)** - In B2 commerce companies sells the in products and services to consumers who are the end users. For e.g. Amazon
- **Business to Business (B2B)** - In B2B commerce commercial transactions takes place between two or more businesses without involving customers. For e.g. Alibab.com
- **Customers to Customers (C2C)** - In C2C e-commerce, consumer sell products directly to other consumer. A popular example of this is eBay.
- **Customers to Business (C2B)** - In C2B e-commerce which is also known as reverse auction or demand collection method. In this customers post their products and services online on which companies can post their bids. A customer reviews the bids and selects the company that meets his price expectations. Common examples include online blog, Flotilla, Google ad word etc.

Objectives:

- The objectives of present study are:
- To analyze the present trends and opportunities of e-commerce in India.
- To examine the factors leading to growth of e-commerce in India.
- To examine the challenges and possible solutions of e-commerce in India.
- To examine the future grow the potential of e-commerce in India.

Research Methodology:

For the present study secondary data has been used including available research articles, journals, books, websites, newspaper, reports etc.

E-commerce in India:

From a buzzword to reality, E-commerce in India has been experiencing an exponential growth. Traditionally India is a country where most of the shopping is done in unorganized markets and nearby store. The same Indian customers who were earlier satisfied with that, are nowadays looking for easy and comfortable mode of shopping- resulted in quick growth of e-commerce. Today people can shop from anywhere within minutes, be it home or workplace. The online market space in the country offers wide range of products and services ranging from travel, hotel reservation, matrimonial services, fashion accessories, electronic gadgets, virtual goods such as books and music download, software, games and even groceries etc.

India's market scenario, growing penetration of internet, broadband, 3G,4G services, laptops, smart phones, tablets, with wide variety of customers and acceptance of idea of virtual shopping has created E-commerce eco-system in India.

Status of E-commerce in India:

Today e-commerce has become an integral part of our daily life. There is e-commerce companies providing wide range of products and services then there are some which provide a specific product accompanied with allied service.

Automobiles - Sale of automobiles in India is now going digital transformation. Many interesting startups have come up in India over the past few years in auto sector like used car marketplace, car insurance, online auto classified, roadside assistance, and car review and rental services. Online car review is one of the important features of automobiles site. Few examples include zigwheels.com, Gaddi.com, Carwale.com and OXL and quicker making the market for used car.

Lifestyle - lifestyle also occupy a larger share in e-commerce industry. Offering various products such as apparel- Men, women and kids, accessories, home decor, mobiles, books, gifts etc. Some of the popular websites include Amazon, Myntra, flipkart etc.

Real estate - Real estate e-commerce websites provides information on new properties as well as for resale. Some of the services which are offered are housing finance, property management consultant services, home insurance, home loan etc.. Example of real estate sites in India includes indiaproperty.com, 99acres.com, magicbricks.com etc.

Stock and shares - There are certain websites that allow the users to trade in various securities. Some of the services provided by these sites includes buying and selling of stocks and shares, market analysis and research, comparison of companies, research on equity and mutual funds, tracking market trends etc. few examples of such sites include www.equitymaster.com, www.5paisa.com etc.

Travel and tourism - E-commerce is bringing new opportunities in the growth of travel and tourism. A major government of India portal, www.tourisminindia.com has wide variety of information for tourist. Other services include passport and visa, weather information, festival dates, travel and accommodation information etc. The entry of online travel industries such as makemytrip.com, yatra.com etc. has revolutionized the travel industry by offering instant booking and comprehensive holiday packaging and choices.

Matrimony- It is said that marriages are made in heaven, but in the world of e-commerce they are made on marriage portal. These website provides services such as matchmaking, astrological services, information on rituals, legal issues etc. Few examples includes shaddi.com, jeevansathi.com etc.

Employment- In the field of employment e-commerce companies are providing employment to job seekers at the click of mouse for which nominal fee is charged. Few websites includes india.com, Naukri.com, shine.com

Growth of E-commerce:

E-commerce has changed the way we live our life today, the history of e-commerce appear pretty shortly but its history began more than 4 decades ago (refer table 1.).Prior to evolution of money there was “barter” system involving exchange of things. With the evolution of money the concept of “marketplace” came. After the evolution of marketplace, few pioneers realized that people would be ready to pay extra if they could get the products delivered at their doorstep. And therefore the concept of “street vendors” came. When postal system came the sellers decided to capitalize on new opportunity and started using mailers to give description of their products. From there “Tele shopping” network was evolved with development of media vehicle. The latest generation of commerce is e- commerce where sellers and buyers can come together to purchase and sell the good and services over the internet.

Table1.Technology advancement and emergence of e-commerce:

Year	Technology	Function/use
late 1970's	EDI-Electronic data inter change, EFT-Electronic fund transfer.	Electronic transaction and electronic exchange of information could be made.
1971or 1972	ARPANET(Advance research project agency network).	Pioneering network for sharing digital resources among geographically separated computers in US became the foundation for internet today.
1990-1991	First web browser, world wide web created by Tim Berner. Lee opened for commercial use.	Internet is opened for commercial use, e-commerce become possible. Netscape released navigation browser named Mozilla.
1994	Netscape Internet in India	VSNL formally launched Internet for public use in India.
1995	Online banking Many e-commerce companies	ICICI is the first bank to champion its usage and Introduced

1996	entered the Indian marketplace	Internet banking in India.
2000's	and people began to get aware of e-commerce.	India times shopping, EBay, Flipkart, Myntra, Snap deal, Jabong, Amazon etc.

E-commerce Giants in India:

The rare hundred safe- commerce web sites in India. But following is the list of game changers in the industry.



Companies	Description
es shopping	India times commerce division of times of India group, it start edits operation in 2000 being one of the easiest e-commerce companies in India.
2007: Flipkart.com	It is an e-commerce company founder in 2007,has launched its own product range under Indian e-commerce company of fashion and casual life style products started in 2007.Merged with flipkart in 2014 to compete against amazon.
2007: Myntra	"Digiflip" with the product in clouding tablets ,USBs, laptopbags.In2014acquiredMyntrafor Rs 20 billion.
2008: Home shop 18	Homeshop18isanindiane-commercecompanywhichisanretailventureofnetwork18 group, which is owned by reliance industries Started as a television channel in 2008,homeshop 18.com website got launched in 2011.
2010: Snapdeal.com	Snapdealis an onlinemarketplace stated in february 2010.It won rehearing asia awarding 2011.Now it has become a multimillion company in online retailing.
2010: Paytm	Indiane-commerce website lauced in 2010. Stared by offering mobilerecharges, bill payments and also offers products similar to flipkart.com,amazon.com.
2012: jabong.com	Itisanindiafashionandlifestylee-commerceportalfoundedin2012.In2016flipkart acquired jabong through its unit myntra for about \$70 million.
2013: Amazon.com	Amazonisanamericane-commercecompanystartedinUSin1994,it entered in Indian Market in 2013.Started as an online bookstore, now diversified into wide range of products. Amazon has grown really fast in India and has become one of the retail of flipkart.
Ebay.in	Ebay in an American -commerce company start ed in 1995 in US, providing B2B,C2C Services through internet. Later launched ebay.in India to cater to the need so find market through baazee.com

Cloud computing has revolutionized the way e-commerce companies operate today-

This technology has transformed all the IT operations with drastic increase in productivity.

E-commerce companies by using cloud computing can reduce the cost involved in purchasing hardware and software as companies can rent rather than system building. The charging mode of “pay-as-service” is very flexible, which helps an e-commerce company to pay for the resources based on the demand.

Cloud computing enables the e-commerce companies to make efficient utilization of idle resources. Businesses can integrate the ideal IT resources on the far-end platform and rent them to customers which help in reducing operation cost and prioritize resource allocation.

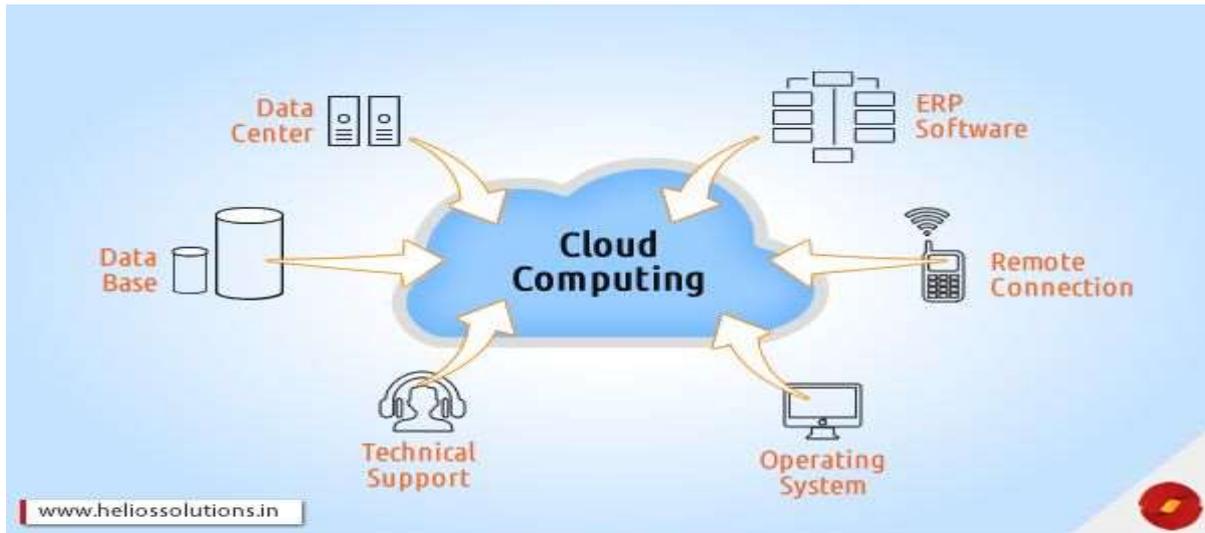
Cloud computing provides flexibility and scalability. There are seasons when e-commerce companies experience heavy traffic such as holiday, sale, etc. In such situations cloud can scale up when necessary and scale down thus reducing cost.

Anytime anywhere accessibility of cloud allow the users to access their data from any location anytime by using a standard web browser. This saves the cost to set up expensive equipment for in-house system.

A cloud service provider also ensures strong security to protect the data. Many providers go for various types of security audit, data encryption and for ISO 2700 1 certification to prove their worth to customers. In addition to this companies can also use hybrid cloud computing model wherein companies can store the sensitive data securely in private cloud while storing public data in public cloud

Use of cloud would also help the business organizations to improve their internal processes, concentrating more on core competencies, improving quality of products and services etc.

Therefore, emergence of cloud computing has opened a new service ecosystem and helps e-commerce companies to make more efficient use of their IT hardware and software investments and a means to accept the innovation.



Challenges in growth of e-commerce and suggested solutions:

Logistic issues -Logistic is one of the foremost hindrance of e-commerce in India. There is not much facility of delivering goods in remote and rural areas. Issues like lack of supply chain integration, high delivery charges of products and delay in delivery also frustrate the consumers this issue can be addressed by regionalization. Possible solution to handle the problem of logistic include:

Currently courier companies handle logistic services in India that has limited reach. To tackle this situation e-commerce companies could start their own in- house logistic operations. For example. Amazon started its own logistic arm that is Amazon transportation services private limited.

Services of Indian post can be used to handle the problem of last mile delivery Automated Guided vehicle (AGV) could solve many logistic problems of e-tailor. For example- Amazon prime is working on its drone based delivery of its products. Setting up of small distribution centers and efficiently using GPS- based devices could solve many of the logistic issues.

Trust issues - Indian customers are still reluctant to purchase the products online. They are often reluctant to disclose their credit card and bank details online due to fear of online fraud.Toaddressthisissuethecompaniesshouldbeopenforallpaymentgateways like- wallets, COD, prepaid cards etc. And there is also a “Touch and feel factor” that Indian customers are more comfortable in buying physically than online especially for products like apparel, jewelry etc. Thus trust is one of the issues that need to be addressed.

Cash on delivery is preferred payment mode in India- In India, most people prefer to pay on cash on delivery basis and for e-commerce companies manual cash collection is quite expensive, time consuming and laborious. According to statistic the most popular digital payment method in India in 2015 is cash on delivery accounted for 57% of all the digit

shopping transactions. (Sources: A.T. Kearney; GfK; Google). Emergence of cashless payment system can boost the e-commerce sector because that can significantly reduce the cost and time of e-commerce companies. With the introduction of financial inclusion project of government of India more people shall have banking access, mobile wallet launched by digital companies like paytm, mobikwik, Apple pay, Google wallet are user friendly and secure. Therefore online players should spread awareness of benefits of cashless payment to encourage the customers.

Indian customers returns much of their products they buy online- Indian e-commerce has lot of first time buyers who come to site to try the products and most of the time return them. Managing returns involve a lot of cost for sellers and e-commerce marketplace.

Tax Structure- Tax rate system in India is an other major factor in growth of e-commerce in India as compared to developed countries like USA and UK. In those countries tax rate is uniform for all the sectors whereas in India it varies from sector to sector. This creates accounting problem for Indian online businesses. Also there are no special provisions for taxation e-commerce companies in India. There is lot of ambiguity in applicability of withholding provisions. GST when implemented is expected to impact the e-commerce positively through simple interstate-goods, uniform tax structure, merchant compliance and easier tax refund, by eliminating the incident of double taxation etc.

Privacy - Privacy is a major issue that need to be addressed. Customers are much concerned about sharing their information because of the fear of cyber-crime. There can be server risk, data transfer risk, financial fraud, reputation damage, Destruction of critical infrastructure etc. Some of the recommendations towards an effective security solution could be:

Ecommerce companies should set the irriskappetite and set strategies accordingly.

Companies must fully integrate cyber risk management in their IT discipline and it should be made an enterprise-level issue and e-commerce companies could also source this task of risk management.

Prepare for cyber-attack by restructuring security data, penetration game etc.

Delivery model - Keeping in mind the “traffic” situation in India’s metros leading to late delivery. E-commerce and logistic service providers are exploring new methods of delivery such as Drone delivery, taking delivery form nearby kirana stores e.g. Amazon kirana Now in Bangalore, crowd-sourced delivery model e.g. Flipkart has tied up with dabbawalas in Mumbai for last mile delivery, etc.

Artificial Intelligence and the use of Drones – Managing the supply chain logistic to provide on-time delivery especially during festive season is a challenge for e-commerce companies today. Solution for it is drone delivery such as amazon prime Air is working on drone based delivery of its products. Also artificial intelligence (AI) is also transforming the e-commerce industry that could enable the users to discover what they are looking for with the click of mouse seamlessly.

Openly approach – Experts suggest that the future of e-commerce lies in mobile. Around 279.5 million people in India accessed internet through mobile devices in 2015 and this is expected to increase to 524.5 million in 2021 (As per statistic digital market outlook). The mobile applications in India are helping e-tailors to reach more customers located in even rural and remote areas. Customers can get alert, updates, view product catalogues, place order and pay by simple mobile application.

Digital advertisement - Digital advertisement is flexible and can be used for any kind of devices and goods. The ability to customize the ads for target audience, increasing engagement and loyalty and two-way interactive opportunity make digital advertisement more effective.

Search Engine Optimization (SEO) - SEO are the set of rules that the website owners could follow to increase its search engine ranking for web promotion. With thousands of products that are there in the digital catalogues could be made visible with the help of SEO technology. Search engine bots prefer websites that are updated, error free, with content etc. Therefore, e-tailors should increase the critical aspect of their online store to make it more search engine preferred and thereby derive more motivated buyers to the website.

Conclusion:

As a concluding note E-commerce is a future of shopping in India and is continuously changing the way people buy and sell products and services today. Future of e-commerce in India would be bright if some of the concerns related to weak cyber law and basic rights such as privacy, intellectual property, prevention of fraud, consumer protection etc. all are taken care of. As pointed out in the present paper there are various factors that are leading to growth of e-commerce in India including changing lifestyle, growing penetration of internet, emergence of smart phones, tablets, 3G, 4G, 5G etc., increasing disposable income of people in India etc. Although Indian customers are adopting the idea of online shopping but still they show disinclination towards e-commerce to some extent. Therefore e-commerce companies with better offers and services, replacement guarantee, problem of logistic, multiple payment system, dedicated 24/7 customer care service, online payment fraud being solved, by creating trust can reduce the hesitation of customers. This paper also showed how cloud computing is transforming the way-commerce companies operate today by offering various benefits.

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