# E-Commerce in India: A Status and Strategic Approach for Marketing

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The current century is the age of Information. The technological advancement in the field of electronics, computers and internet has entered into every walk of life and revolutionized the era of information in the 21<sup>st</sup> century. A kind of explosion in the application of information technologies has turned the ambition of managing business electronically anywhere globally into a reality. The term Commerce has been reshaped into Electronic Commerce or popularly known as E-Commerce. E-commerce is the performing of business transactions of trade and commerce electronically, i.e., buying or selling of goods, services and information as a product over the Internet. It is important to mention here that information has also become a product in the present times. Electronic commerce seems possible on the basis of technologies such as online transactions, electronic data interchange (EDI), inventory management systems, mobile commerce, electronic funds transfer, supply chain management, online retailing, online auctions, Internet marketing, electronic bulletin boards and automated data collection systems. E-commerce has grown at an incredible speed in the first decade of the present century that it is no longer a concept now rather a market force to boost up the global economy. In this manner, E-Commerce has enabled new forms of businesses along with novel ways of performing transactions of trade and commerce. Thus E-Commerce has unleashed a new revolution in the global world.

Electronic commerce is a technique used to exchange business information across the Internet. The Internet is not a new phenomenon. The Internet has given a boost of Ecommerce because it is a low-cost alternative to the proprietary networks. Therefore, it is essential for a business organization to have an Internet connection to its computer system for participating in electronic commerce. The Internet is our extensive and ever-growing connectivity of computers around the world. In other words, the Internet is an international network of networks. It is worldwide information highway.

### Historical Chronology-

The Internet has evolved over time into its current form and it is still evolving. The Internet's predecessor, ARPANET (Advanced Research Project Network) started in 1969, connecting together only four computers at different locations in the United States. ARPANET was designed to serve the needs of the U.S. Department of Defence by linking together the four mainframe computers at Stanford Research Institute, the University of California at Los Angeles, the University of California at Santa Barbara, and University of Utah for working on defence-related research projects. It was built to solve the problem of communication between computers that were thousands of miles apart but needed to work together. The Department of Defence eventually opened its network to educational institutions and then the commercial users.

In the 1970s, other networks such as Bitnet and Usenet came into existence as the technology became more public. The Electronic mail was also introduced in 1972. In the same decade, banks began to use electronic funds transfer (EFT) over secure private networks that changed the style of the functioning of financial markets. During the late

1970s and early 1980s, electronic, commerce became widespread within companies in the form of electronic messaging technologies, i.e., electronic data interchange (EDI) and electronic mail. Electronic messaging technologies streamline business processes by reducing paperwork and increasing automation. In 1979, Michael Aldrich demonstrated the first online shopping system. In the mid 1980s, a completely different type of electronic commerce technology spread among consumers in the form of online services that provided a new form of social interaction (such as chat rooms and inter-relay chat, i.e., IRC) and knowledge sharing (such as news groups and File Transfer Programs). Around the late 1980s, e-commerce became integral part of business, although not over the public internet.

In the late 1980s and early 1990s, electronic messaging technologies became an integral part of workflow or collaborative computing systems (also known as groupware). The World Wide Web was not prototypes until 1990. In 1992, Tim Berners-Lee implemented his ground breaking concept of the WWW and was known as its father. Suddenly a large pool of information could available on the World Wide Web at no charge. In the 1990s, the advent of the WWW on the Internet represents a turning point in electronic commerce by providing an easy-to-use technology solution to the problem of information publishing and dissemination. The Web made electronic commerce a cheaper way of doing business in terms of economies of scale. It enabled more diverse business activities and accrued economies of scale in terms of the scope. It also enabled small business to compete on a more equal technological footing with resource-rich multinational corporations. Thus, the case of one of the WWW has contributed to the Internet's exponential growth. In 1995, Amazon.com is launched by Jeff-Bezos. In 1995, eBay was founded as first Auction Web. In 1999, Alibaba Group was set up in China. According to a Study conducted by Teriz N., the global e-commerce reached 150 billion dollar by the end of the 20<sup>th</sup> century. In essence, there is no doubt that the Internet presents an opportunity to create and implement entirely new ways of conducting business. Electronic commerce has been found around the world in various forms since the late 1960s, however, new and constantly evolving techniques have enabled business organizations to perform e-business functions better, faster and more inexpensively than ever before since 1993. The result has been an explosion of e-commerce activity.

### **Objectives of the Study-**

Keeping in view the hypothesis of the study, its specific objectives are the following:

- 1. To study the present status of e-commerce in India by highlighting chronological landmarks in the totally novel and emerging area.
- 2. The international notions on E-Commerce for a broader perspective.
- 3. To assess the potentials and policy implications of e-commerce in future in India.

### Sources of Data and Research Methodology-

The followings are the sources of data for the present study-

- National Report on E-Commerce Development in India, Inclusive and Sustainable Industrial Development Working Paper Series, WP 15, United Nations Industrial Development Organisation (UNIDO), 2017.
- 2) ASSOCHAM Reports, Various Issues, Available at https://www.assocham.org
- 3) Internet and Mobile Association of India, Available at <u>https://www.iamai.in</u>

The present study uses a qualitative and quantitative research methodology of Exegesis and Hermeneutics which are special types of Content Analysis by interpreting the

notions of commerce and industry into literal and allegorical meaning of socio-historic context. These are truly interpretive techniques for analyzing qualitative and quantitative data. The Content Analysis is quite an appropriate research technique for the systematic, objective and quantitative description of the research data procured through the aforesaid sources.

### Results, Discussion and Current Status of E-Commerce in India-

During nearly the first one and a half decade, the rising use of internet and mobile phones has changed the way and lifestyle of modern life. The Internet and Mobile Association of India (IAMA) study indicates that online travel dominates the E-Commerce industry with an estimated 70 per cent of the market share. However, e-retail in both its forms, i.e., online retail and marketplace together, increased its share from 10 per cent in 2009 to an estimated 18 per cent in 2013. Increasing mobile and internet penetration, mcommerce sales, advanced shipping and payment options, exciting discounts, and the push into new international markets by e-businesses are the major factors of this unprecedented growth, noted by the joint study of the ASSOCHAM and Deloitte. Calculations based on industry benchmarks estimate that the number of parcel check outs in e-commerce portals crossed over hundred million in 2013. However, this share represents only less than 1 per cent of India's total retail market, poised for continued exponential growth in the coming years. In case such robust growth continues over the next few years, the size of e-retail industry is expected to be 10 to 20 billion US dollar by 2017 to 2020. This increases consumer-led purchases in consumer durables, electronics, apparels and accessories along with traditional products. The digital commerce market in India has grown steadily from \$4.4 billion in 2010 to \$13.6 billion in 2014 and further to \$19.7 billion in 2015. Devices like smart phones, tablets and technologies like 3G, 4G, Wi-Fi and high speed broadband has been helping to increase the number of online customers. Banks and other players in ecommerce ecosystem have also been providing a secured online platform to pay effortlessly via payments gateways. The digital commerce market in India is expected to cross \$50 billion mark by the end of 2018 on the back of growing Internet population and increased online shoppers from the current level of \$ 38.5 billion, reveals the ASSOCHAM- Deloitte joint study. According to another study of the Confederation of Indian Industry (CII) and Deloitte, the online retail sector in India is expected achieve \$1 trillion (Rs 660,000 crores) market by 2020. The Goods and Services Tax is expected to boost the growth of e-commerce by simplifying taxation and logistics. The policy makers must bear in their mind that the logistics infrastructure is the weakest link in the whole story of E-Commerce in India. Internet penetration across the country has been rising with as many as 354 million users reported as of September 2015.

The Government of India has announced various initiatives *viz.*, Digital India, Make in India, Start-up India, Skill India and Innovation Fund. The timely and effective implementation of these programs will definitely support the E-commerce growth and expansion in the country. The e-commerce industry has been directly impacting the micro, small & medium enterprises (MSME) in India by providing means of financing, technology and training. It has the favourable forward and backward linkages on other industries as well. The technology driven innovations like digital payments, enthusiastic customer engagements and digital advertisements will likely support the growth in the area. Such a growth in e-commerce sector will also boost employment, increase revenues from export, increase tax collection by ex-chequers, and provide better products and services to customers in the long-term. The outsourcing of retail logistics is a powerful tool

for small businesses which don't have the budget to compete in the digital marketplace on their own.

# **Global Trends and Potentials in E-Commerce-**

According to Statista, the E-retail has been US \$2290 billion in 2017 and is expected to rise to US \$ 2774 billion by the end of the year 2018. It will be nearly 20 per cent growth in a year that is highly significant and noteworthy. It is also pertinent that there have been no sign of decline in transactions at all. Digital buyers' penetration worldwide has been 46.4 per cent in 2017 and may go up to 47.3 per cent in 2018. E-Commerce has proved strongly growing and emerging domain. It has remained a very popular choice of new investments and new businesses. According to Amasty, M-Commerce has hit US \$ 700 billion revenue in 2017 that is nearly 300 per cent growth over the past four years. In general, the M-Commerce has been growing faster than the E-Commerce. Mobile is no more a fancy trend these days rather it has become a dire necessity, avoiding which may result in significant losses in the overall turnover and revenue. In the words of Tom Grinsted, the Product Manager in the Guardian, "......being mobile-friendly, having content that is quick, usable, graceful and compelling on smart phones is not optional." It is important to know for the global players in E-Commerce that Asia may be credited with almost half a share in mobile commerce market. China, UAE and Turkey have highest number of mobile shoppers with 68, 57 and 53 per cents of their respective total population. This is the time for audio and visual search in e-retailing. There is a trend of omni channel that has become very challenging. Such trend is not based on the high expectations of technology only but also of customer service. There is also an estimate of 66 per cent shoppers made additional purchase while returning any item in a store, according to Order Dynamics. There is a need of every connecting points with the customer to be explored. Omni channel is not an end, it is all about customer service and shoppers satisfaction. Augmented Reality and Virtual Reality technology is also such a field that has to go a long way in the direction. Allan Zander of Sprott School of Business and author of the Planet Mainframe said that Augmented Reality may do for E-Commerce what Omni channel has done for physical commerce.

It seems that China has been becoming an increasingly big player in the field of Ecommerce since the platform provider China's Alibaba is much bigger than the America's Amazon. It is very important to take a note on the innovations and experiments in China to have a better glimpse into the future of E-commerce. China has become such a quickly growing economy, and their tech-friendly companies have been exerting much economic power over global markets. China has been providing even same-day delivery in some locations particularly for food and grocery deliveries. This kind of speed and convenience requires a great deal of infrastructure, for example, warehouses, advanced inventory management systems and such other quick delivery solutions. These are the areas where Chinese tech giants have been rolling out. Chinese technology may serve as the basis for E-Commerce, or even become the providers of, these solutions in other parts of the world.

### Sustainability of E-Commerce-

The unprecedented growth in E-Commerce has raised and attracted our attention towards sustainable environment. No doubt, currently one of the major issues at the forefront of E-commerce is its sustainability. The matter of sustainability cannot be ignored in the field of E-Commerce. Consumers are educated and more informed in the present times. The society is more apt to be interested in supporting environmentally and ethically responsible business corporate. At the same time, supply chains are still massive producers of greenhouse gases and industrial waste. E-commerce businesses may perform their duties by supporting and sponsoring the green products. Besides, it is also imperative to use sustainable, recyclable and eco-friendly packaging materials for these green products. There may be a number of ways to reduce waste in your supply chain and that too with the added benefit of reducing unnecessary economic and social costs. The advance data collection and analysis software may go a long way to implement an effective supply chain, resulting in a win-win situation for the global economy. Moreover, it is also important to dispose of supply chain wastes like card boxes, plastic packing puffs and Styrofoam after the E-Commerce transaction is completed. In this manner, sustainability may take various forms depending upon different business models to product packaging. There are implications of product choices for the consumers on the infrastructure networks. The slogan of the 21<sup>st</sup> century must be 'Reduce, Reuse and Recycle' meaning thereby reducing the economic and social costs, reuse the packaging materials and recycle the industrial wastes. Likewise, Go Green and Think Green may be the other slogans to work with. In order to reduce economic costs, it is also required to maintain pack stations when the customers were not found at home and delivery is to be done in next few days. A research in the area may be inevitable in this direction as well. There is an ample scope for business growth in such an emerging and challenging scenario. The Climate Pledge signed by the Amazon CEO Jeff Bezos to advance Paris Climate Accord is quite exemplary in the direction for the rest of the E-Commerce world.

## Automation in E-Commerce-

Automation is such a process that facilitates every individual, institution, business organisation, industry, military and what not. It is highly visible in every walk of life. Automation is the e-commerce realm. E-Commerce automation has designed all the tasks, processes and work flows with the help of the software. The automation in E-Commerce will save the time and prove cost effective as well. Automation in E-Commerce is the key to focus on growth and leave the rest of the bottom line jobs as tech-friendly. It has significantly progressed into more of the logistics and fulfilment processes. Many of the most high-profile experiments with e-commerce fulfilment automation may be visible in Amazon's work on self-driving delivery trucks and autonomous delivery drones. These autonomous vehicles and drones will be dispatched from warehouses to drop items directly to consumers' doorsteps. There are lesser-known places where automation is nonetheless extremely important. Automated customer service in the form of chatbots is increasingly helpful in efficiency and effectiveness. These days such chatbots are adapting to be able to handle customer queries of many different kinds.

Automated marketing and outreach platforms have also been becoming more popular. It is performed by the wide adoption of automated social media management systems and other marketing suites. Likewise, automated fraud detection is another vital area of E-commerce, where payment information is saved to account credentials and constantly monitored against foul play. Automated purchasing is also appearing in brick & mortar and grocery stores along with hotels and restaurants, allowing customers to order and purchase items without visiting the business houses. Some Chinese furniture stores have been experimenting with virtual and augmented reality to show their customers to see how different furniture and fixtures might look and fit in their home by creating a completely simulated experience and that too inside the store. The customers feel an automated experience from the moment they walk in and up to the moment they walk out. There is a dire need to build infrastructure for increased agility in the field of automation in E-Commerce. The implications for product choices are much wider in automation in E-Commerce. Last but not the least, the automation in E-Commerce may be quite effective in the demand forecasting and keeping the infrastructure ready accordingly.

## Conclusion and Suggestions -

The basis of e-commerce may be divided into the three parts, e.g. electronic information, electronic relationships and electronic transactions. Peter Finger called these as the three electronic pillars those support open market processes. In brief, the three pillars may be discussed in the following manner:

The first pillar, electronic information, may be viewed as a global repository of documents and multi-media data. Constructing an electronic information pillar is easy to the sense that most word processing software will easily convert documents into a web-readable format. The challenge is to construct a good solid pillar that will not crumble. Therefore, the construction of electronic information pillar must not be conducted in a shaky manner. The retrieval of the desired electronic information is the main objective. Search engines and other intelligent agents are increasing in popularity to assist users more efficiently and effectively to administer the www.

The second pillar, electronic relationships, is the central pillar. The electronic relationships pillar is about building a site that has the feeling of being a port of entry into a community. Having entrants pass through this port of entry on a somewhat regular basis is the key to successfully engaging in electronic commerce. In order to attract users again and again to a site, the site needs to have certain features like it must be innovative, value added, providing information and interaction.

The third pillar is that of the electronic transactions. Many businesses have built an electronic information pillar and some have built or are building an electronic community pillar, but substantially fewer have constructed the electronic transaction pillar. Two impediments for constructing the p;illar exist: the ability to engage in meaningful and sufficient negotiation processes and security and transaction data. Companies need to first determine what their role should be in an electronic market place and then begin a formal system design process that matches the needs of the company. The technology for building an electronic commerce society is available. Traditional businesses are, for the most part, still and planning their entrance to the electronic business realm. Proper planning and assessing are vital precursors to proper implementation of this technology.

Electronic commerce may be visualized in different perspectives. In a communication perspective, e-commerce is the delivery of information, products, services and payments through telephone lines, computer networks and any other such means. In a business perspective, e-commerce is the application of technology towards the automation of business transaction and workflow. In a service perspective, e-commerce is an instrument that addresses the desire of consumers, firms and management to cut service costs while improving the quality of goods and increasing the speed of service delivery.

The collection, classification, processing, manipulation and distribution of information are quite common in trade and commerce. These days, it is the velocity of information processing and dissemination that determines the speed of real commerce. Computers and networks, by virtue of their supersonic speed, have been creating electronic commerce with the potential to be more efficient in searching and interacting with customers, communicating with trading partners and developing new products and markets. Thus, Electronic commerce endeavours to improve the execution of business transactions over various networks. Such improvements may result in more effective performance in terms of better quality, greater customer satisfaction and better corporate decision-making. These improvements may also result in greater economic efficiency in terms of lower costs. Lastly, these improvements may also result in more rapid exchange in terms of high speed and accelerated interaction. Conclusively, amid a myriad of factors, global trade and increased competition are the major impetus for business organizations to use information and communication technologies in the conduct of business and hence the Electronic Commerce in vogue.

E-Commerce has become a very important part and parcel of many multilateral negotiations such as Regional Comprehensive Economic Partnership (RCEP), WTO, BRICS etc. E-Commerce still faces various challenges in international trade, domestic trade, competition policy, consumer protection, information technology, etc. As a growing area with huge stake from both domestic and international players, it becomes pertinent to regulate it keeping in mind the interests of both tech companies and consumers. An encouraging environment and a level playing field should be fostered. The Policymakers should also be aware of shaping a vibrant and dynamic domestic industry. A comprehensive policy in the field of E-Commerce is of utmost importance to reflect India's position in domestic and international markets both or different multilateral forums.

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