

A REVIEW

A review on Indian e-commerce

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ABSTRACT

Electronic commerce (e-commerce) or business is more than just another mode to sustain or boost existing business practices. Rather, electronic commerce is a paradigm shift. It is a disruptive innovation that is drastically altering the traditional approach of performing business. The e-commerce market is thriving and poised for robust growth in Asia, focusing in Indian context than it is showing marvelous business growth for the developing nation. The country has enjoyed exceptional augmentation of almost 50 per cent in the past five years. Although the trend of e-commerce has been making rounds in India for 15 years, the appropriate ecosystem has now started to fall in place. The extensive increase in the number of internet users, growing acceptability of online payments, the proliferation of internet-enabled gadgets and also favourable demographics are the key factors driving the growth story of e-commerce for the developing nation. The number of users making online transactions has been on a rapid growth trajectory and it is expected to grow from 11 million in 2011 to 38 million by the end of 2015. Venture capitalists (VC) and private equity players have demonstrated their confidence in the escalation of e-commerce in the India. This is sufficiently validated by the noteworthy increase in the total investments (US\$305 million in 2011 against US\$55 million in 2010). The present study has been undertaken to describe the present status and facilitators of e-commerce in India, analyze the present trends of e-commerce in India and examine the barriers of e-commerce in Indian context.

KEY WORDS : E-Commerce, E-Business, E-Tailing, Value proposition

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India had an internet user base of about 354 million as of June 2015 (*timesofindiaeconomictimes*, 2015) and is expected to cross 500 million in 2016 (Internet users in India to cross 500 mn in 2016). Despite being

the second- largest userbase in world, only behind China (650 million, 48% of population), the penetration of e-commerce is low compared to markets like the United States (266 million, 84%), or France (54 M, 81%), but is growing at an unprecedented rate, adding around 6 million new entrants every month (Online shoppers in India, 2014). The industry consensus is that growth is at an inflection point (Indian e-commerce at inflection point (*Vccircle.com*, 2010).

Internet is one component which has become the key ingredient of quick and rapid lifestyle (Fatimah *et al.*, 2000). Be it for communication or explorations, connecting with people or for official purposes, 'internet' has become the central-hub for all. The e-commerce

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Industry in India has come a long way since its early days. The market has matured and new players national as well as international have entered the market space in Indian context. In the present dynamic scenario, e-commerce market in the B2C space is growing in demand as well as in the array of services (Soh *et al.*, 1997). The transition to online purchasing from traditional purchasing is taking a long time in the Indian market. E-commerce includes not only buying and selling goods over internet (Oakes, 2002), but also various business

processes within individual organizations that support the goal. It involves conducting business with the help of the electronic media, making use of the information technology such as Electronic Data Interchange (EDI). In general connotation, e-commerce involves paperless transactions and usage of EDI (Electronic Data Interchange), electronic mail, bulletin boards, fax transmissions, and electronic fund transfers (Block *et al.*, 1996). As with ecommerce, electronic business (e-business) also has a number of different definitions and

Table 1 : Chronological order of events in the evolution of web and e-commerce

Sr.No.	Year	Particulars
1.	1946	The first electronic computer, ENIAC, is constructed at the University of Pennsylvania
2.	1957	The Soviet Union launches Sputnik, the first artificial satellite.
3.	1958	To counter Soviet technological advances, the U.S. forms the Advanced Research Projects Agency (ARPA), with the Department of Defense, to develop U.S. leadership in science and technology applicable to the military
4.	1969	ARPANET, the forerunner of the Internet, established with four nodes: UCLA, Stanford, UC-Santa Barbara, and University of Utah.
5.	1970	First applications of electronic data interchange (EDI).
6.	1973	First international connection to ARPANET, University College of London. Initial work on a transmission protocol (later to be called TCP/IP) that allows diverse computer networks to interconnect and communicate with each other.
7.	1974	BBN opens Telnet, the first commercial version of ARPANET
8.	1982:	Transmission Control Protocol (TCP) and Internet Protocol (IP) established by ARPA. This leads to a definition of an "internet" as a connected set of networks, specifically those using TCP/IP, and "Internet" as connected TCP/IP internets.
9.	1983	Internet Activities Board (IAB) is created.
10.	1984:	Science fiction author William Gibson coins the term "cyberspace" in his novel, Neuromancer. Internet host computers (computers with registered IP address) exceed 1,000.
11.	1987:	Internet users exceed 10,000.
12.	1988	Internet worm disables 6,000 of 60,000 Internet hosts. A Cornell University graduate student created the worm. Infected computers were connected through ARPAnet and other E-mail networks in the Internet loop. Some of the US's top science and research centers were affected.
13.	1990	The ARPANET is shut down.
14.	1991	Sir Tim Berners-Lee, working at CERN in Geneva, develops a hypertext system to provide efficient information access. He posts the first computer code of the World Wide Web in a relatively innocuous newsgroup, "alt.hypertext." Later, people refer to the Internet itself as the Web.
15.	1992	World Wide Web released by CERN.
16.	1994:	Pizza Hut sells pizza on its website. First Virtual, the first cyber bank, opens.
17.	1997	Inception of business-to-business (B2B) e-commerce/ US Postal Service issues electronic postal stamps.
18.	2000	Internet users exceed 360 million.
19.	2011:	Internet users tally almost 2 billion. Users in over 200 countries are connected.

[Sources: Smith *et al.* (2010) and Internet World Stats (2011)]

is used in a number of different contexts.

Concepts and definitions :

E-commerce refers to a broad array of online business activities for services and products (Manocha and Behl, 2012). It also pertains to “any form of business transaction in which the parties network by electronic means (*i.e.* electronically) rather than by physical exchanges or direct physical contact (Goele and Channa, 2012). A more complete definition is, e-commerce is the use of electronic communications and digital information processing technology in business transactions to generate, transform and redefine relationships for value creation among organizations and between organizations and individuals (Das, 2012). These business transactions

are categorized either into Business to consumer (B2C), Business to business (B2B), Business to government (B2G), Consumer to consumer (C2C) and Mobile commerce (m-commerce). E-commerce can be traced back to the first electronic computers, which were built in the 1950s (Smith, 2011). However, e-commerce did not gain extensive popularity until development of the World Wide Web (www) in the 1990s (Jain and Kapoor, 2012). A chronological sequence of events concerning the Internet and e-commerce is provided as under for better understanding.

India’s growth potential :

India’s e-commerce market is set to hit \$76 billion by 2021 from \$13.6 billion in 2014, according to e-Tailing

Travel	Real Estate	Fashion	Furniture	Health	Education
<ul style="list-style-type: none"> • MakemyTrip • Goibibo • Yatra • IRCTC • Cleartrip 	<ul style="list-style-type: none"> • MagicBricks • CommonFloor • 99acres • Housing 	<ul style="list-style-type: none"> • Jabong • Myntra • YepMe • Zovi • FashionandYou 	<ul style="list-style-type: none"> • FabFurnish • Pepperfry • Urban Ladder • Zansaar 	<ul style="list-style-type: none"> • Healthkart • LensKart • Portea Medical 	<ul style="list-style-type: none"> • EduKart • Meritnation • Edureka • Toppr • embibe

Fig. 1: Vertical specific e-commerce players in India (Illustrative)

Travel	Real Estate	Fashion	Furniture	Health	Education
<ul style="list-style-type: none"> • Expedia • Booking • Airbnb 	<ul style="list-style-type: none"> • Zoopla • Property Wire • Realtor 	<ul style="list-style-type: none"> • ASOS • BOOHOO • Stylebop 	<ul style="list-style-type: none"> • IKEA • Home24 • Stellar 	<ul style="list-style-type: none"> • Global Health Store • VitaminGlobal 	<ul style="list-style-type: none"> • Pearson • McGraw Hill • Alison

Fig. 2: Vertical specific global e-commerce players (Illustrative)



Source: IAMAI, Deloitte analysis

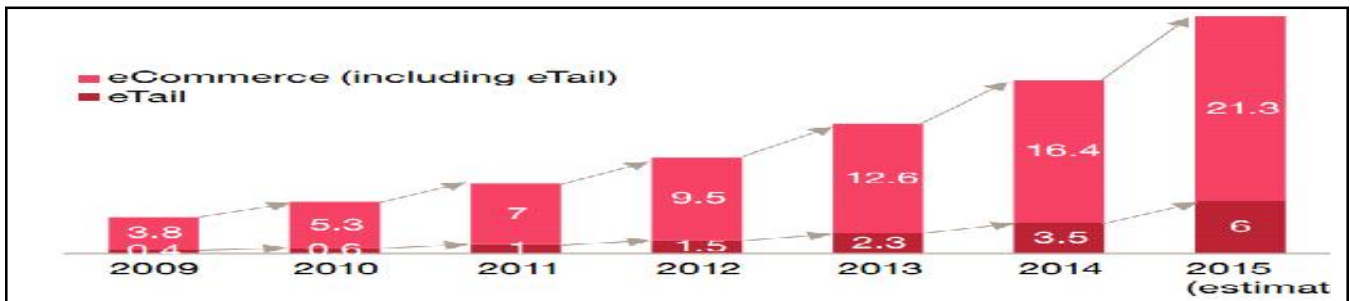
Fig. 3: Online retail in India- Market size (\$ billion)

India, in the present time e-commerce is a personification in Indian culture and it has become an integral part of our daily life. There are websites providing any number of goods and services available at just one click, there are those, which provide a specific product along with its allied services (Poon and Swatman, 1999). Vertical specific e-tailers find it motivating to focus on a niche product or service as they can differentiate their services from mainstream e-commerce players (Fariselli *et al.*, 1999). The value proposition of these ventures helps them raise funds easily and also helps in customer acquisition as they generally try to solve the challenges faced by

people daily. The critical aspect of these industry specific ventures is offering a compelling and user-friendly experience, mostly driven by convenience, richness of information, and cost effectiveness. Following are few companies involved in e-commerce trade in Indian as well as global context.

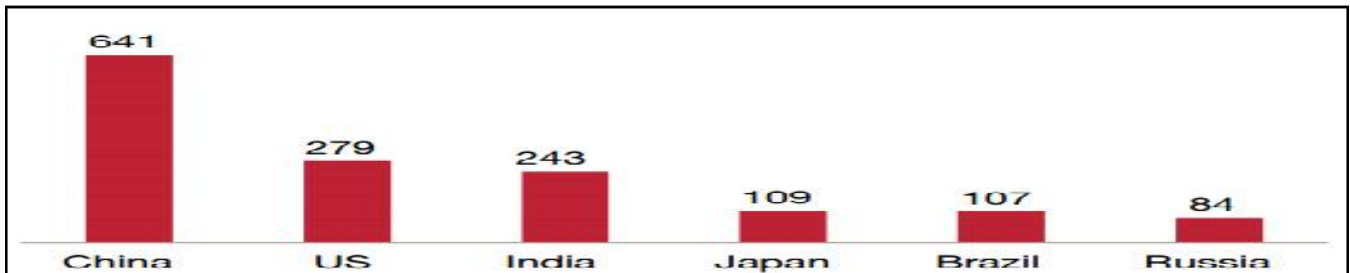
Market size and growth :

India's e-commerce market was worth about \$3.9 billion in 2009, it went up to \$12.6 billion in 2013. In 2013, the e-retail segment was worth US\$2.3 billion. About 70 per cent of India's e-commerce market is travel related



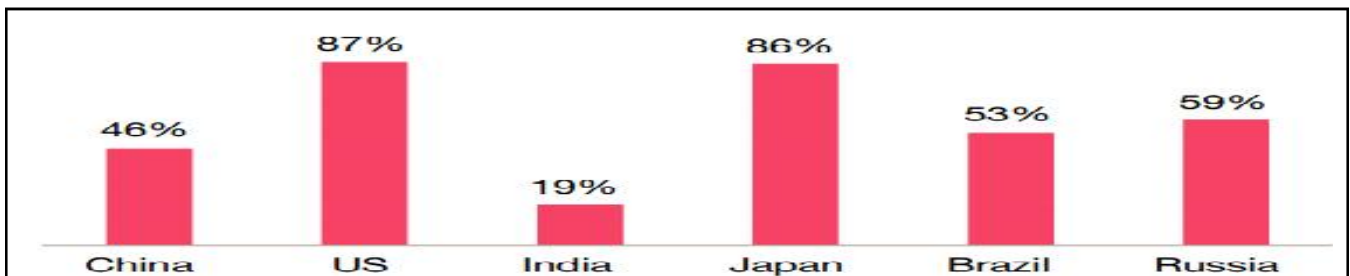
Source: IAMAI, CRISIL, Gartner, PwC analysis and industry experts

Fig. 4: India's e-commerce and e-tail growth



Source: Internet Live Stats website accessed on 9 December 2014

Fig. 5: Internet users by country: In million (2014)



Source: Internet Live Stats website accessed on 9 December 2014

Fig. 6: Internet penetrations as percentage of population (2014)

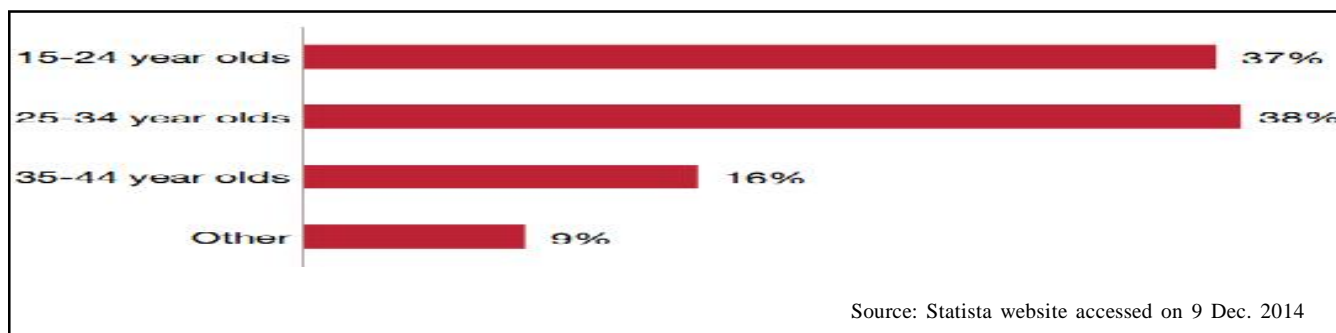


Fig. 7: Demographic profile of India online users (as on September, 2013)

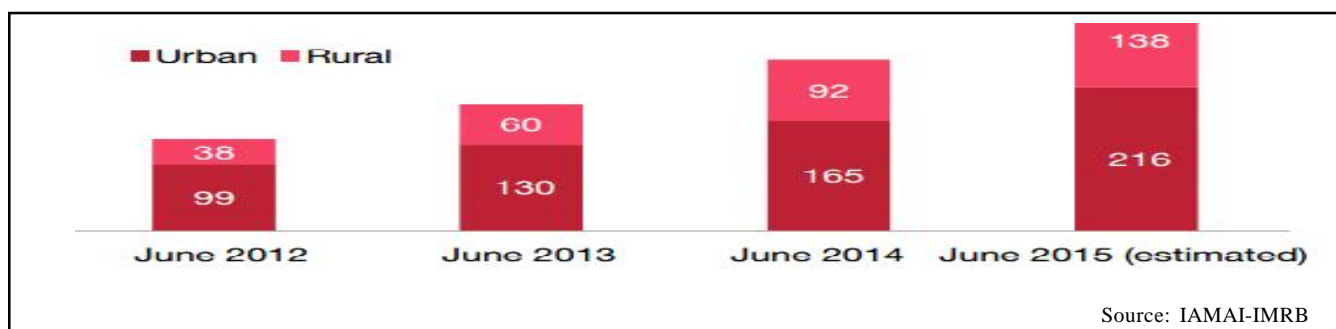


Fig. 8: Geographical distribution of internet users in India (million)

(PwC, 2014). According to Google India, there were 35 million online shoppers in India in 2014 Q1 and is expected to cross 100 million mark by end of year 2016 (Online shoppers in India to cross 100 million by, 2016). CAGR *vis-à-vis* global growth rate of 8–10 per cent. Electronics and apparel are the biggest categories in terms of sales.

According to a study conducted by the Internet and Mobile Association of India, the e-commerce sector is estimated to reach Rs. 211,005 crore by December 2016. The study also stated that online travel accounts for 61 per cent of the e-commerce market (Media Nama, 2016).

By 2020, India is expected to generate \$100 billion online retail revenue out of which \$35 billion will be through fashion e-commerce. Online apparel sales are set to grow four times in coming years (PTI, 2016).

India's retail market is estimated at \$470 billion in 2011 and is expected to grow to \$675 Bn by 2016 and \$850 billion by 2020, – estimated CAGR of 10 per cent. According to Forrester, the e-commerce market in India is set to grow the fastest within the Asia-Pacific Region at a CAGR of over 57 per cent between 2012–16 (Asia Pacific Online Retail Forecast, 2011).

The digital commerce market in India has grown steadily since past decade, as per industry estimates, the digital commerce market in India is expected to reach unbelievable growth till the end of 2015 on the back of growing internet population and increased online shoppers. Online travel accounts for nearly 61 per cent of e-commerce business while e-tailing contributes about 29 per cent (Turban *et al.*, 2002). Visa India spends data showed 53 per cent growth in the number of e-commerce transactions in 2014.

Since the e-commerce industry is rising at brisk pace, changes can be seen over a year. The sector in India has grown by 34 per cent (CAGR) since 2009 to touch 16.4 billion USD in 2015. The sector is expected to be in the range of 22 billion USD by the end of 2015.

Currently, e-travel comprises 70 per cent of the total e-commerce market. E-tailing, which comprises of online retail and online market places, has become the fastest-growing segment in the larger market having grown at a CAGR of around 56 per cent over 2009–2014. The size of the e-tail market is pegged at 6 billion USD in the end of 2015. Books, apparel and accessories and electronics are the largest selling products through e-tailing,

constituting around 80 per cent of product distribution. The increasing use of smart phones, tablets and internet broadband and 3G has led to developing a strong consumer base likely to increase further (Kratchman *et al.*, 2008). This, combined with a larger number of homegrown e-tail companies with their innovative business models has led to a robust e-tail market in India rearing to expand at high speed.

Factors that will fuel growth :

A considerably low (19%) but fast-growing internet population of 243 million in 2014 is an indicator of the sector's huge growth possible in the developing economy.

It is obvious that in absolute terms India's internet users are short by only 36 million as compared with 279 million in the United States of America and higher than that in Russia, Japan and Brazil. Never the less, in relation with its population, about 19 per cent Indians use the internet. This indicates the potential of internet use in India and as internet penetration increases, the potential of growth for the e-commerce industry will also increase parallel to this. An investigation of the demographic summary of internet users further testifies that e-commerce in the country will rise rapidly in years to come. Around 75 per cent of Indian internet users are in the age group of 15 to 34 years as described in the following Fig.7. This category shops more than the remaining population. Peer pressure, rising aspirations with career growth, fashion and trends encourage this segment to shop more than any other category and India, therefore, clearly enjoys a demographic dividend that favours the growth of e-commerce. In coming years, as internet presence increases in rural areas, rural India will yield more e-commerce business.

Conclusion :

E-commerce players are banking on the Indian internet growth story. The fact that an average online user is spending more time online gives these players the opportunity to draw more users to their websites through innovative marketing strategies such as those revolving around social media. Recent years have seen a remarkable transformation in the way India shops and trades. The sector has grown three times in four years to nearly 12.6 billion USD in 2013. Various industry estimates project that the sector will further growth five to seven times over the next four to five years. Online

retail, while today representing a small fraction of the e-commerce space is one of the fastest growing segments. It is also the most challenging in fulfilling its fundamental proposition of transcending physical boundaries to deliver a variety of products to the customer's doorstep. Logistics and infrastructure in e-retailing becomes the very backbone of the fulfillment network and the basis on which stringent service level expectations are set and met, and customer mind-space among competing alternatives is won. In India, these are arguably the weakest links, and therefore the enhanced need for greater attention and management bandwidth to these critical functions. E-Commerce players also need to focus on innovation to tackle challenges arising from low credit and debit card penetration. They could consider working with financial intermediaries to develop payment systems, such as escrow services, for resolving issues around security and product delivery. The RBI could step in and reduce the number of online transaction failures by defining service metric quality and monitoring it at regular intervals. This would enable it keep a close eye on the performance of financial intermediaries and plug gaps as soon as they occur.

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