

E-COMMERCE GROWTH IN INDIA: A STUDY OF SEGMENTS CONTRIBUTION

D Mahipal, Osmania University
K Shankaraiah, Osmania University

ABSTRACT

This paper examines the growth and different segments of electronic commerce (e-commerce) in India. As e-commerce is one of the top growing businesses in India and provides a great market potential for investments, foreign Investors are funding e-commerce sector. The study concludes that there would be a prospective growth of e-commerce in India, if the Government provide a legal security and framework for e-commerce and the domestic and international trade are allowed to expand their basic rights such as intellectual property, privacy, prevention of fraud, consumer protection, etc.

Keywords: B2C, Online Travelling, E-Tailing, Growth, Market Share, Segment.

INTRODUCTION

E-commerce is the subset of e-business, which means that the e-commerce is an influential selling instrument and a straight distribution system, where the straight distribution system is an alternative method for distributing products to consumers, differing from the traditional distribution process that uses the middlemen such as jobbers, wholesalers and retailers. In simple terms, the e-commerce system is similar to the direct distribution system, as it uses websites to get the product orders and transfers the goods and services from the producers to the end consumers directly by eliminating the middlemen from the distribution process.

Expressly, Information Technology (IT) (Siddegowda, Ilango & Devi, 2016) is radically transforming the way of business around the world and the E-commerce industry has completely transformed itself into a digital sector many years past. The E-commerce industry will set a new platform for the development of the business, as E-commerce business has proved itself as part of the new economy and a best way to do business across the world. The present business environment in developing countries has the potential to enhance the development of the E-commerce industry like India. Brand E-commerce plays a vital role in increasing the internet consumption as well as employment generation.

Specially, the number of years of using internet (Vasumathi, Sasi & Subashini, 2016) is an important independent variable in predicting the preference towards virtual buying and the younger generations are now becoming most valuable consumers in the global market and they play an important role in an online shopping.

In the present Indian business environment, e-commerce occupies an important position after passing through the various stages, which may be understood from the different phases of evolution of e-commerce presented below:

Phases of Evolution of E-commerce

The different phases of evolution of e-commerce presented under first phase and second phase as under:

First Phase (1995 to 2005)

The introduction of internet in India in 1995 marked the beginning of the first wave of e-commerce in the country. Moreover, the economic liberalization after the launch of reforms in 1991 attracted Multi-National Corporations (MNCs) and caused for a significant growth in Information Technology (IT) industry. The implementation of liberalization policies led to the demise of the license regime, high taxes and import restrictions and facilitated the growth of Small and Medium Enterprises (SMEs). The IT industry and SMEs were the early adopters of internet that led to the development of B2B, job searches and marital portals as stated hereunder:

B2B Directory: India's first online B2B directory was launched in 1996. The liberalization of the country's international trade policies was the main factor that enhanced the growth of B2B virtual portals.

Virtual Marital: In 1996, the first virtual matrimonial portal was launched in India, which transformed the perceptions about the matchmaking process from "*marriages are made in heaven*" to "*marriages are made in cyber space*".

Virtual Recruitment: India's virtual recruitment industry took shape in 1997. The growth of the services sector, following the launch of economic reforms in 1991, resulted in the creation of additional jobs and the internet proved to be an efficient medium that allowed employers and job seekers to connect each other.

The first wave of e-commerce in India was characterized by low internet penetration, a small online shopping user base, slow internet speed, low consumer acceptance of online shopping and inadequate logistics infrastructure. The IT downturn in 2000 led to the collapse of more than 1,000 e-commerce businesses in India, as a result there was a muted activity in India between 2000 and 2005.

Second Phase (2005 to Present)

After the muted activity during 2000 to 2005, there has been a significant development in e-business, specifically in the areas of travelling, retailing, group purchasing, societal interaction, etc., as presented below:

Air Travel: The entry of Low Cost Carriers (LCCs) in the Indian flying sector in 2005 marked the beginning of the second phase of e-commerce in India. Travel developed as the biggest segment and individuals began trusting on internet to search for travel-related information and to book tickets. As a result of which, the success of the online travel segment made consumers comfortable with shopping through online, this paved the way for a massive improvement of online retail.

Virtual Travel: The decision of LCCs like IndiGo and SpiceJet to sell their tickets online and through third parties enabled the development of **Online Travel Agents (OTAs)**. Prior to the entry of LCCs in 2005-2006, air travel was considered a luxury and meant only for the rich and corporate travel. LCCs changed the scenario by making air travel affordable for a large number of people. They developed their own websites and partnered with OTAs to distribute their tickets online and, thus, contain costs. The Indian Railways had already implemented the e-ticket booking initiative by the time LCCs commenced their online ticket booking schemes.

Virtual Selling: The growth of online retail was partly driven by changing urban consumer lifestyle and the need for convenience of shopping at home. This segment established in the second movement in 2007 with the launch of multiple online retail websites. New businesses were driven by entrepreneurs who looked to differentiate themselves by enhancing customer experience and establishing a strong market presence.

Group Purchasing: In the Initial period of 2010, the group buying and daily deals models became a global trend. Group-buying sites have seen a significant rise in the number of unique visitors and membership which enhanced the e-business.

Societal Interacting: In the recent years, social networking gained steam in the Indian online space and it has gone on to become an integral part of people's lives. Initially it is used for staying connected with friends but now social networking websites have emerged as an anchor in any company's digital strategy. Termed as social commerce, it is an important avenue for e-commerce players to reach out to target customers. Companies have started establishing their presence in the social media space for branding activities, connecting with customers for feedback and advertising new product launches.

In this context, it is noticed that e-commerce form of marketing (Rath & Samal, 2013) is a modern technique used by business firms, companies and industries for doing their business work through the e-net system in order to enhancing their business plans, strategies for better product promotion as well as increasing economic health of various industries, firms, organizations, etc.

After understanding the concept and evolution of E-commerce, an attempt has been made to review the past studies related to the study to establish the relevance of the study and the same is presented chronologically in brief as under.

REVIEW OF LITERATURE AND RELEVANCE OF THE STUDY

Mallikarjun Rao (2006) while studying the "Factors affecting growth of e-commerce in India" concluded that there was a close association between online purchase and availability of information about the vendors, hence, suggested that more information will increase respondents comfort level for online trade. Gnana (2006) concluded that today e-commerce as an alternative/additional mode is being accepted by many businesses, but the rate of adoption of e-commerce is varying in different industries, for instance, a traditional industry like automotive industry in India is yet to adopt e-commerce in a big way. Ming-Hsien, Chandrees, Binshan, Hung-Yi (2009) opined that consumers will trust the website if they feel the site keeps a good e-commerce ethical performance, such as, practicing the privacy policies and stating it explicitly, describing products or services in an appropriate way. While analysing the Trends in e-

commerce, Rekha (2010) stated that e-buyers need to adapt to a safe mode of on-line payment and use alternative modes of payments, such as, virtual credit cards that involve less risk in diversifying the information for payment.

Rashad, Abhinav, Wan, Mahan & Shahriar, (2011) studied the “Factors influencing perception of consumers in e-business, Gaining trust in e-commerce: With reference to the Technology Acceptance Model (TAM)” and found that the perception of the consumers influencing their decisions have been addressed in order to understand why the people want to use an online service for perception or discard their purchase. Mustafa (2011) studied the determinants of e-commerce customer satisfaction, trust and loyalty in Saudi Arabia and found that in B2C E-commerce customer loyalty in Saudi Arabia is strongly influenced by customer satisfaction but weakly influenced by customer trust. Khushbu (2012) found that social media platforms do have an impact on business and marketing. In a study on “Perceptions towards Online Shopping”: An Empirical Study of Indian Consumers”, Zia (2012) opined that the perception of online shoppers is independent of their age and gender. In a study on “Perceptions towards Online Shopping”: An Empirical Study of Indian Consumers, Muhammed (2013) concluded that very poor positive perceptions about Bosnian companies’ web presences and their online activities. Namita and Preeti (2013) concluded that online consumer behaviour using factor analysis and the reasons for using online shopping like, trust, information about the product and services, convenience, effortless shopping. You-Qinghe (2014) inferred that online marketers and retailers have to develop appropriate market strategies, make technological advancements and make the correct marketing decisions in order to retain current customers and attract new customers. While studying “Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study”, Afrina (2015) concluded that companies should create innovative customer experiences and specific strategies for media to identify the best path for driving up digital marketing performance. Sumanjeet (2010) examined the state of e-commerce laws in India: A review of Information Technology Act and expressed that there are many prominent issues which are critical for the success of e-commerce that the present IT Act is weak on several fronts and in the absence of sound legal framework of e-commerce cannot create a success story in India. Indian Government must increase the safe and secure business environment on cyberspace and must protect the interests of Indian software industries, BPO sector and other stakeholders. In a study on “Antecedents of Online Shopping Behavior in India”: An Examination, Rakesh and Khare (2011) examined that a survey of 325 students studying in Indian universities was conducted. The results indicate that Indian students' intention to buying online is influenced by utilitarian value, attitude toward online shopping, availability of information and hedonic values. Male students have a more positive attitude toward online shopping compared to female students. Gehrt, Rajan, Shainesh, Czerwinski & O'Brien, (2012) studied the “Emergence of online shopping in India: Shopping orientation segments” and surveys were collected from 536 consumer panel members. Three segments were identified: Value singularity, quality at any price and reputation/recreation. The quality at any price and reputation/recreation segments was playing the major role in online purchase decision in India. Rakesh & Khare, (2012) analysed the “Impact of promotions and value consciousness in online shopping behaviour in India” and the study observed that online shopping continues to attract investment from retailers and offers or other promotional methods of e-retailers are not influenced by Indian consumers. Promotions may not be essentially viewed by consumers as an important attribute while purchasing products or services online.

Kalia, Arora & Law, (2016) noticed that legal validity of electronic transactions, security, content regulation, intermediary liability and jurisdiction are partially addressed by IT Act, whereas, junk mail and spamming, intellectual property, payment, taxation of e-commerce transactions and consumer protection are unaddressed. This Information is useful for policy and decision makers in government and e-commerce businesses.

Chatterjee, (2016) studied the “E-Commerce in India: A review on culture and challenges” and the study observed that E-Commerce business throughout the world has brought a remarkable change in the business landscape and it also has redefined the business scenario by radically changing contours of space and time and it has reshaped the conception of nature of business management. India having large population with internet users is expected to be one of the major players in E-Commerce environment. In a study on customer perception towards online precious metal jewellery shopping in India Rekha, (2016) examined that surveyed the twelve statements were grouped into four factors i.e., Product, Convenience, Service and online shopping hindrances and the composite score were calculated for each grouping factor. A significant difference is observed in the perception of two groups in case of three set of factors i.e., Product, Convenience and Service. While analysing “e-commerce in India: Evolution and revolution of online retail”, Kalia, Kaur & Singh, (2017) inferred that India is third biggest nation in terms of internet users. India will drive e-commerce in Asia pacific region after China and Indonesia and the study concludes that there will be a prospective growth of electronic commerce in India is extremely positive. Arora & Rahul, (2018) studied that the key components of perceived risk (security risk, privacy risk, product risk and non-delivery risk) in e-commerce and the impact of perceived risk on online shopping attitude among online women shoppers in India and the study proved that perceived risk is not a significant factor influencing attitude of women shoppers in India. Security risk was marginally significant out of the different types of risks considered in the study.

The above review may reveal that the most of the research meant for understanding the security measures of digital marketing and factors influencing the e-business through the consumers’ perceptions. But, specifically the studies were not conducted to analyse the recent e-commerce growth and industry segment in India together. Thus, this study aimed at filling the gap with the objectives as: i) Analyse the growth of E-commerce in India and ii) Present E-commerce industry segments in India by restricting to B2C business model.

The source of data is secondary in nature and collected from the past studies, whereas, the analysis is made with the help of simple (growth over the preceding year) and compound annual growth rates $CAGR = ((\text{End Value}/\text{Start Value})^{1/(\text{Periods}-1)} - 1)$.

E-COMMERCE GROWTH IN INDIA

Over the last two decades, rising internet and mobile phone penetration have changed the way of communication and do business and at present, e-commerce heavily leaning on the internet and mobile phone revolution which have fundamentally altered the way businesses reach their customers and e-commerce has taken the world of retail by storm and captivated the imagination of an entire generation of entrepreneurs with e-commerce ventures with various business and commercial models. The explosive growth in the last few years has already catapulted the biggest firms out of the billion-dollar territory in general and in particular, the e-commerce in India has witnessed a significant growth, which is evident from the e-commerce market size during the recent period, as shown in the following Table 1.

Years	2010	2011	2012	2013	2014	2015	2016
Sales	26, 63	35,142	47,349	53,301	81,525	125,732	168,891
Simple growth rate % (over the preceding year)		33.8	34.7	12.5	53.5	54.2	34.3
CAGR%							36.3%

Source: IMRB, I-Cube 2016

The above table reveals that the size of e-commerce market has enlarged from INR 26,263 Crores to INR 168.891 Crores with the Compounded Annual Growth Rate (CAGR) of 36.3%. A close observation of simple growth rates computed on the basis of the preceding year reveals that the growth rate percentages vary from 12.5% to 54.2%, representing a significant growth in e-business in all the years, barring the year 2013. The growth is higher in 2014 and 2015, because of the fact that India's e-commerce market announced its arrival in 2014 and there was Flipkart's 'Big Billion Day Sale' followed by Google's 'three-day online shopping festival'. In all, there has a dramatic rise in number of unique visitors and merchants and rapid growth in product categories on offer including holiday packages, motorcycles and even homes. The year 2014 noticed valuation of some of the larger players touched a billion-dollar mark.

Further, according to Indian Market Research Bureau (IMRB) the e-commerce sales are projected to reach around INR 220,330 crore by December 2017. Thus, it may be inferred that the India's digital commerce industry is growing at a swift pace year by year.

After knowing the market size of e-commerce, an attempt is made here to analyse the segment wise growth during the latest 3 years period i.e., from 2014 to 2016 and the same is presented below.

E-COMMERCE INDUSTRY SEGMENTS' MARKET SIZE

According to the Digital Commerce Report published by the Internet and Mobile Association of India (IAMAI) and Indian Market Research Bureau (IMRB) that e-commerce segment in India (B2C model) Classifieds into two parts as, online travelling industry and online non-travelling industry.

Online Travel

Some of the prominent online travelling web sites in India are Makemytrip, Yatra.com, Cleartrip, Expedia.co.in, Travelguru, Musfir.com, Booking.com, Redbus.com, Goibibo, Abhibus.com, Ticketgoose, Thomascook, Ayo, etc., covering booking rail, air, bus tickets, hotel accommodations, tour packages and travel insurance ,etc., whereas, non-travelling industry are e-tailing market, financial service market, online matrimony and classified market and other online services markets, a brief description of which is as follows:

E-Tailing

Includes, purchases of various consumer products/services such as books, apparels, footwear, jewellery and other such as home and kitchen appliances, consumer durables,

electronics (mobile phones/computers/laptops), home furnishings, etc. In India there are many e-tailers as, Flipkart, Amazon, Snap deal, Shop clues, etc.

Financial Service Market

Includes, transactions like mobile/data card recharges, post-paid mobile/data card bill payments and utility bill payments transacted from third party websites. The most popular examples of financial service websites are Paytm, Mobikwik, Free charge, etc.

Online Matrimony and Classified Market

Includes transactions like matrimony, car, real estate, etc. In India there are many classified marketers as, Uber, Ola cabs.com, etc.

Other Online Services Market

Includes transactions like online entertainment ticketing, online commuting, online food and grocery delivery, online tickets for movies, sports, show/concerts, etc. Some of the popular online service websites are Swiggy, Foodpanda and Bookmyshow.com, etc.

The Market share of the segments of the e-commerce industry during 2014 to 2016 may be understood from the following Table 2:

Segment	Sales in 2014	Sales in 2015	Sales in 2016
Online traveling	50,050 (61%)	76,396 (61%)	95,198 (56%)
E-Tail	24,046 (29.5%)	37,689 (30%)	59,876 (35%)
Financial services	4,508 (6%)	5,231 (4%)	6,277 (4%)
Matrimony and classifieds	8,96 (1%)	2,592 (2%)	3,370 (2%)
Other online services	2,025 (2.5%)	3,823 (3%)	4,170 (3%)
Total	81,525	125.732	168, 897

Source: IMRB, I-cube 2014, IMRB, I-cube 2015 and IMRB, I-cube 2016¹⁵

During the year 2014, online travel industry with 61% share in the total digital commerce sales occupies the first position among all segments, whereas, e-tailing industry with 29.5% share stands second and followed by financial services market with 6%, other online services market with 2.5% share and matrimony and classifieds market with 1%.

The study of market shares of the e-commerce segments in the year 2015 may show that the share of the online travel industry as 61% in the total digital commerce sales, made the sector to retain the first position among all segments, whereas, e-tailing industry, with 30% share, stands second and followed by financial services market with 4%, other online services market with 3% and matrimony and classifieds market with 2%.

During the year 2016, all the segments have the same pattern, in specific terms, online travel industry also, with 56% share in the total digital commerce sales, retains the first position among all segments, whereas, e-tailing industry, with 35% share, also retains the second place

and followed by financial services market (4%), other online services market (3%) and matrimony and classifieds market (2%).

A close examination of segments shares in the total sales during the 2014 to 2016 may reveal that share of online travelling though occupied the first position, its share is declined in 2016 and e-tailing apart from retaining its second position, improved its share significantly in the year 2016. The share of financial services shown decline, whereas, the matrimony and classifieds and other segments have a little increase in 2015 over 2014, but remained constant in 2016 over 2015 in percentages, however all the segments increased in absolute terms during the period.

The overall observation of segment wise growth reveals that the online travelling and e-tailing have assumed around 90% of the total sales through e-commerce and became prominent segments in the recent years.

CONCLUSION

Though first phase of evolution of e-commerce in India was characterized by low internet penetration, a small online shopping user base, slow internet speed, low consumer acceptance of online shopping and inadequate logistics infrastructure, in the present business environment, the e-commerce in India has the potential to enhance its growth in the second phase. The main factors that contributed to the growth of e-commerce in second phase include the entry of LCC in to the Indian flying sector, development of OTAs, online ticket booking schemes, launch of multiple online retail websites, establishing a strong market presence, social media space for branding activities, connecting with customers for feedback and advertising new product launches, etc.

A close analysis of e-commerce market in the total sales during the 2010 to 2016 may be revealed that the size of e-commerce market has increased from INR 26,263 Crores to INR 168.891 Crores with the (CAGR) of 36.3%. A close observation of simple growth rates computed on the basis of the preceding year revealed that the growth rate percentages vary from 12.5% to 54.2%, representing a significant growth in e-business in all the years, barring the year 2013. The growth is higher in 2014 and 2015, because of the fact that India's e-commerce market announced its arrival in 2014 and there was Flipkart's 'Big Billion Day Sale' followed by Google's 'three-day online shopping festival'.

In all, there has a dramatic rise in number of unique visitors and merchants and rapid growth in product categories on offer including holiday packages, motorcycles and even homes. The year 2014 noticed valuation of some of the larger players touched a billion dollar mark.

According to (IMRB) the e-commerce sales are projected to reach around INR 220,330 crore by December 2017. Thus, it may be inferred that the India's digital commerce industry is growing at a swift pace year by year.

Two main important segments, contributed to the growth of e-commerce in India, are online travelling segment and online retailing segment.

A close examination of segments shares in the total sales during the 2014 to 2016 may be revealed that share of online travelling though occupied the first position, its share is declined in 2016 and e-tailing apart from retaining its second position, improved its share significantly in the year 2016. The share of financial services shown decline, whereas, the matrimony and classifieds and other segments have a little increase in 2015 over 2014, but remained constant in 2016 over 2015 in percentages, however all the segments increased in absolute terms during the period.

The overall observation of segment wise growth reveals that the online travelling and e-tailing have assumed around 90% of the total sales through e-commerce and became prominent segments in the recent years.

Further, the study concludes that there will be a prospective growth of electronic commerce in India if the government provide a legal security and framework for e-commerce so that while Domestic and International trade are allowed to expand their basic rights such as intellectual property, privacy, prevention of fraud, consumer protection, etc.

REFERENCES

- Afrina, Y., Sadia, T. & Kaniz, F. (2015). Effectiveness of digital marketing in the challenging age: An empirical study. *International Journal of Management Science and Business Administration*, 1(5), 69-80.
- Arora, N. & Rahul, M. (2018). The role of perceived risk in influencing online shopping attitude among women in India. *International Journal of Public Sector Performance Management*, 4(1), 98-113.
- Chatterjee, S. (2016). E-commerce in India: A review on culture and challenges. *International Conference on Soft Computing Techniques and Implementations (ICSCITI)*, art.no.7489547.
- Gehrt, K.C., Rajan, M.N., Shainesh, G., Czerwinski, D. & O'Brien, M. (2012). Emergence of online shopping in India: Shopping orientation segments. *International Journal of Retail & Distribution Management*, 40(10), 742-758.
- Gnana, C.K. (2006). *E-commerce in Indian corporate sector-A case study of automotive sector*. Thesis submitted to department of management, Osmania University Hyderabad.
- Kalia, P., Arora, R. & Law, P. (2016). Information technology act in India: E-commerce value chain analysis. *NTUT Journal of Intellectual Property Law and Management*, 5(2), 55-97.
- Kalia, P., Kaur, N. & Singh, T. (2017). E-commerce in India: Evolution and revolution of online retail. *Mobile Commerce: Concepts, Methodologies, Tools and Applications*, 2, 736-758.
- Khare, A. & Rakesh, S. (2011). Antecedents of online shopping behaviour in India: An examination. *Journal of Internet Commerce*, 10(4), 227-244.
- Khushbu, P. (2012). Social media marketing in India-creating new groundwork in marketing innovation. *International Journal of Multidisciplinary Management Studies*, 2(5), 91-99.
- Mallikarjunrao, C. (2006). *Factors affecting growth of e-commerce in India*. Thesis submitted to department of management, Osmania University, Hyderabad.
- Ming-Hsien, Y., Chandrees, N., Binshan, L. & Hung-Yi, C. (2009). The effects of perceived ethical performance of shopping websites on consumer trust. *Journal of Computer Information Systems*, 50(1), 15-24.
- Muhammed, K.Ö. (2013). Consumers' perceptions about e-commerce activities of Bosnian companies. *International Journal of Academic Research in Business and Social Sciences*, 3(6), 134-145.
- Mustafa, I.E. (2011). Determinants of e-commerce customer satisfaction, trust and loyalty in Saudi Arabia. *Journal of Electronic Commerce Research*, 12(1), 78-93.
- Namita, B. & Preeti, K. (2013). Online consumer behaviour: An exploratory study. *Global Journal of Commerce and Management Perspective*, 2(4), 98-107.
- Rakesh, S. & Khare, A. (2012). Impact of promotions and value consciousness in online shopping behaviour in India. *Journal of Database Marketing and Customer Strategy Management*, 19(4), 311-320.
- Rashad, Y., Abhinav, G.J., Wan, F.Y., Mahan, P. & Shahriar, M. (2011). Factors influencing perception of consumers in e-business: Gaining trust in e-commerce. *International Conference on Advancements in Information Technology, International Proceedings of Computer Science and Information Technology*.
- Rath, R.C. & Samal, S. (2013). An overview of e-commerce practices of marketing on supply chain management in India: Emerging business opportunities and challenges. *International Journal of Supply Chain Management*, 2(2), 107-115.
- Rekha, P. (2010). *Trends in e-commerce-An empirical study*. Thesis submitted to department commerce, Osmania University Hyderabad.
- Rekha, I.S. (2016). A study on customer perception towards online precious metal jewellery shopping in India. *International Journal of Applied Business and Economic Research*, 14(14), 251-257.
- Siddegowda, C.J., Ilango, V. & Devi, J. (2016). Analysis of e-commerce challenges in India by using weka tool. *International Journal of Control Theory and Applications*, 9(36), 363-371.

- Sumanjeet. (2010). The state of e-commerce laws in India: A review of information technology act. *International Journal of Law and Management*, 52(4), 265-282.
- Vasumathi, A., Sasi, R.K. & Subashini, R. (2016). An empirical study on customer preference towards online shopping among engineering students. *International Journal of Services and Operations Management*, 24(3), 289-307.
- You-Qinghe, C.W. & Liu, K. (2014). The online shopping change the retail business model: A survey of the people use online shopping in China. *IOSR Journal of Business and Management*, 15(5), 77-110.
- Zia, U. (2012). Perception towards online shopping: An empirical study of Indian consumers. *National Monthly Refereed Journal of Research in Commerce & Management*, 1(8), 9-22.