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## ROLE OF IT IN MANAGING E-COMMERCE BUSINESS IN DEVELOPING COUNTRIES

**Ms. Kanchan Rishi Bagga**

Asst. Prof. In ASM & Computer Dept. Gujranwala Guru Nanak Khalsa College, Civil lines, Ludhiana. India.

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### ABSTRACT

IT and e-commerce are inseparable terms as the e-commerce industry is absolutely dependent on IT for its operations and intensification. e-commerce is also referred to as application of IT in business and commerce. IT is an umbrella term which involves usage of computers, including hardware, software and networks used to communicate, store and manage the requisite information. The concept of e-commerce has been evolving since a number of years and is causative to the economic growth of several developed and developing economies. The prospective for the growth of e-commerce in the developing countries is very high but IT being the precondition, lack of IT infrastructure hampers the rate of its growth. The growth of e-commerce is primarily dependent upon the boost in IT infrastructure. The Smartphone market and Internet diffusion has proved to be a catalyst for growth of e-commerce industry. This paper aims to discuss the role of IT and its services in driving e-commerce industry in developing countries like India in the near future.

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### INTRODUCTION

Technology continues to be a transformative force and is changing the way individuals live, interact, and work. IT had changed the approach of doing business globally and the scenario is identical for India and other developing economies. IT is an umbrella term which involves usage of computers, including hardware, software and networks used to communicate, store and manage the requisite information. The applications of ICT are very diverse and one such area is electronic commerce. Today e-commerce has become an integral part of everyday life. Accessibility to e-commerce platforms is not a privilege but rather a necessity for most people, particularly in the urban areas. There are alternative e-commerce platforms available for almost every aspect of our lives, starting from purchasing of everyday household items to online shares and commodities. "e-commerce" is defined as the application of information and communication technologies (IT) which support all the activities and realms of business [Srivastava and Singh, 2013]. The concept of e-commerce has been evolving since a number of years and is causative to the economic growth of several developed and developing economies. Out of the key factors responsible for the growth of e-commerce IT is a leading one. IT and e-commerce **are inseparable terms as the e-commerce industry is absolutely dependent on IT for its operations** and intensification. The concept of e-business is very flexible and therefore covers all possible uses of information and communication technologies. IT infrastructure and services is not a major issue in developed countries but for developing countries like India it sometime seems to be a barrier in the growth of electronic commerce. e-commerce means sale or purchase of goods and services conducted over internet or TV channels. The goods are ordered electronically the payments or delivery of goods and services need not be conducted online.

More usage of internet facilities, high educational standards, changing life style and economic growth of the country are the few major reasons for the demand of e-commerce techniques and tools. Among these techniques online shopping has a vital role. Among these reasons the growth of internet and its increased penetration into the rural areas of India is the most significant factor for the exponential growth of e-commerce and specifically online shopping. The budding breach of technology facilitators such as Internet connections, broadband and third generation services, laptops, smartphones, tablets and dongles, coupled with ever-increasing acceptance to the idea of virtual shopping, is set to steer the e-commerce industry.

The B2C segment seems to be most promising and is expected to lead the e-commerce market in the near future, in addition to the growth of IT infrastructure the easy payment modes and innovative policies are some of the other factors behind this growth. In future, the sector is planning to offer much more revolutionary practices such as transacting with the help of Mobile money, and having access to virtual trial rooms [Forrester Research, 2012]. E-commerce focuses on the use of IT to facilitate the activities and associations of the business with customers. The further research areas in e-commerce are; the quality of sponsored ad text, ad position, Search Engine Optimization (SEO), PageRank, yellow pages, and bid management etc. [Gangeshwer, 2013].

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The sector is classified into four major types, based on the parties involved in the transactions – Business-to-business (B2B), business-to-customer (B2C), customer-to-business (C2B) and customer-to-customer (C2C).

### 1. Classification Of E-Commerce Business

Figure-1: Types of e-commerce Business.

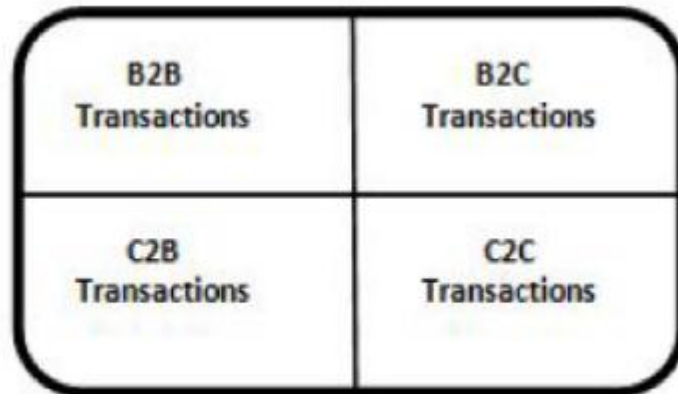


Figure-1: Types of e-commerce Business.

#### Business to Business (B2B):

B2B is e-commerce businesses between one business firm to another such as a manufacturer and a wholesaler or between a wholesaler and a retailer.

#### Business to Consumer (B2C):

B2C is e-commerce businesses between a business firm and a consumer such as between a manufacturer and consumer or retailer and consumer.

#### Business to Consumer (C2B):

C2B is e-commerce businesses in which individual customers offer to sell products and services to companies who are prepared to purchase them. This business model is the opposite of the traditional B2C model.<sup>24</sup>

#### Business to Consumer (C2C):

C2C is e-commerce businesses in which individual customers offer to sell products and services to other individuals who are prepared to purchase them.

### 2. e-Commerce Portals:

#### (a) Multi Product E-Commerce Portals:

Some internet portals provide almost all categories of goods and services in a single site. These e-commerce portals provide goods and services in a variety of categories like apparel, accessories, health and beauty products, books and magazines, computers and peripherals, vehicles, consumer electronics, household appliances, jewellery, etc. Some portals offer the platform to sell and purchase the used articles like electronics, vehicles, furniture etc.

#### (b) Single Product E-Commerce Portals:

- Stock and Shares Trading
- Real Estate
- Travel and Tourism industry
- Matrimonial
- Job Portals.

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**•Role of Banks:**

**Net banking:**

E commerce is promoted by Internet banking that facilitates the online funds transfer. The net banking facility is available for savings account holders as well as current account holders. Customers can use this facility for online bill payment, Ticket booking, purchase of goods etc.

**Credit/Debit Cards:**

Banks facilitate E-commerce by providing the most vital trade instrument, namely the Credit or Debit Card these help the customers to pay for their purchases made online.

**Mobile Banking:**

Mobile banking permits customers of bank to conduct a financial transactions over a mobile device like mobile phone or tablet [Mitra, 2013]. In recent years, the mobile banking has been reflecting a growing trend with the volume and value increasing by 108.5% and 228.9% respectively. Mobile Banking has shown significant growth in the last three years. RBI statistics shows the following information which is really encouraging for the sector[RBI Report, 2014].

Year	No. of Users (Million)	Volume (Million)	Value (Billion Rs.)
2010-11	5.96	6.85	6.14
2010-11	12.96	25.56	18.21
	(117.45%)	(273.139%)	(196.58%)
2012-13	22.51	53.30	59.90
	(73.69%)	(108.53%)	(228.94%)

Table-1: Mobile Banking Users.

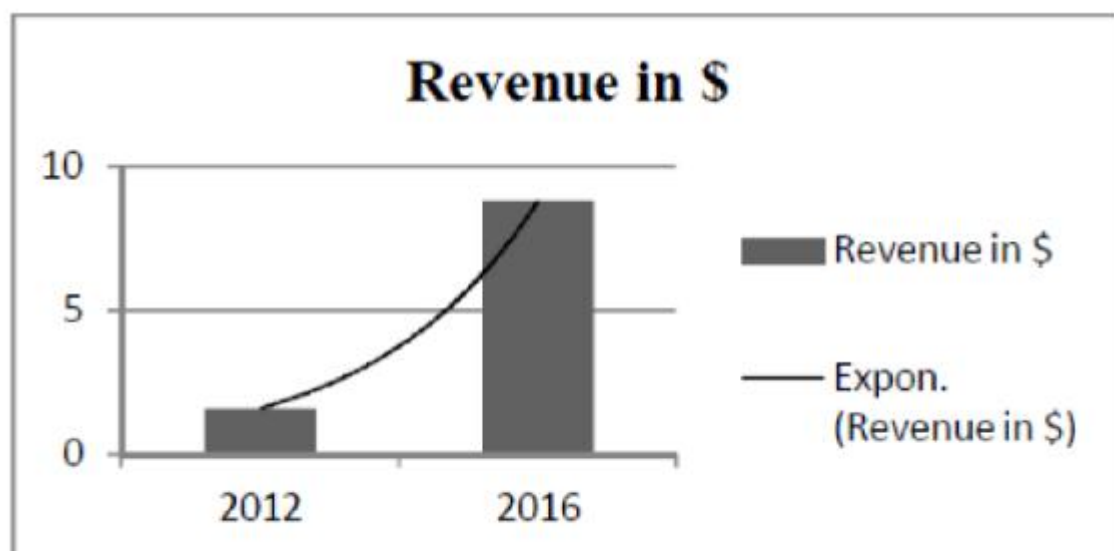


Figure-2: Online Shopping Trends.

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The statistics above given by Forrester Research, Inc. shows that the e-commerce and online shopping in India is getting a noticeable growth. The top most companies and MNCs could not neglect the importance of online shopping for their product branding, promotion and increased sales. It has been observed that Indian consumers have matured over the years and increased their acceptance for various payment approaches such as net banking and prepaid wallets. e-commerce prospect has thus widened due to recognition of online shopping as a safe shopping medium. Of the total 200.0 million credit and debit card holders, just about 10.0 million people transact online, indicating a huge untapped market.

### SECURITY

With the help of structured questionnaire, the study has been done. Each of the questions covers the valid reasons to find out the online shopping factors, influences and demands. The data analysis of the questioner gives a very positive sign about the security aspect of the e commerce industry especially online shopping.

Response	Number of Respondents	Percentage
Positive	163	65.2
Negative	83	34.8
Total	250	

Table-2: Security of Online Shopping.

### Response Percentage

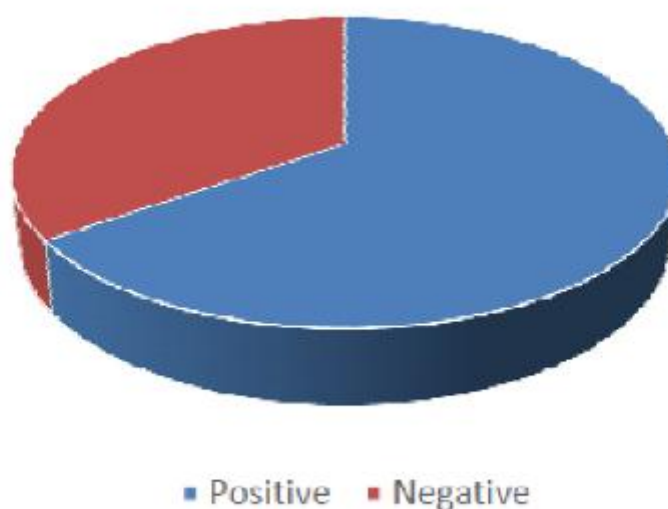


Figure-3: Safety Factor.

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The above table and graph illustrates that the respondents are positive in regards to the safety and security factors. Customers find online shopping safe and secure and feel comfortable to give their details and make online payments [Sharma, 2013].

### GROWTH OF INTERNET

Nearly 3 billion people i.e. 40% of the world's population is using the internet. Every one out of three people in the developing countries are using internet. Talking about developing countries, the number of Internet users will be doubled in 5 years, from 974 million in 2009 to 1.9 billion in 2014 [ITU, 2014]. This rate of growth of internet users is directly related with the growth of e-commerce business.

### E-COMMERCE AND IT LANDSCAPE IN URBAN AND RURAL INDIA

Rural India has started understanding the importance of e-commerce industry and especially online shopping. The unavailability of attractive offline channels in underdeveloped cities has encouraged the brand-aware population to shop online. Around 3,311 Indian cities were engaged in online shopping between July 2010 and June 2011, of which over 1,267 were non-metro cities. This reflects how ecommerce has helped in overcoming the discrimination factor across cities, facilitating access for consumers from smaller towns to the same branded and quality products which earlier were a distant dream. Companies are working towards providing more online content in regional languages to tap the niche consumer base. While majority of the Internet population use the English language-based platform while surfing, offering content in local languages such Hindi, Marathi, Telugu and Tamil might widen the target audience. Going forward, the rural population is well positioned to reap the benefits from the available low cost technology platforms, efficient logistics management, increasing vernacular content and secured payment modes.

Figure-4: Sector Wise Internet Users.

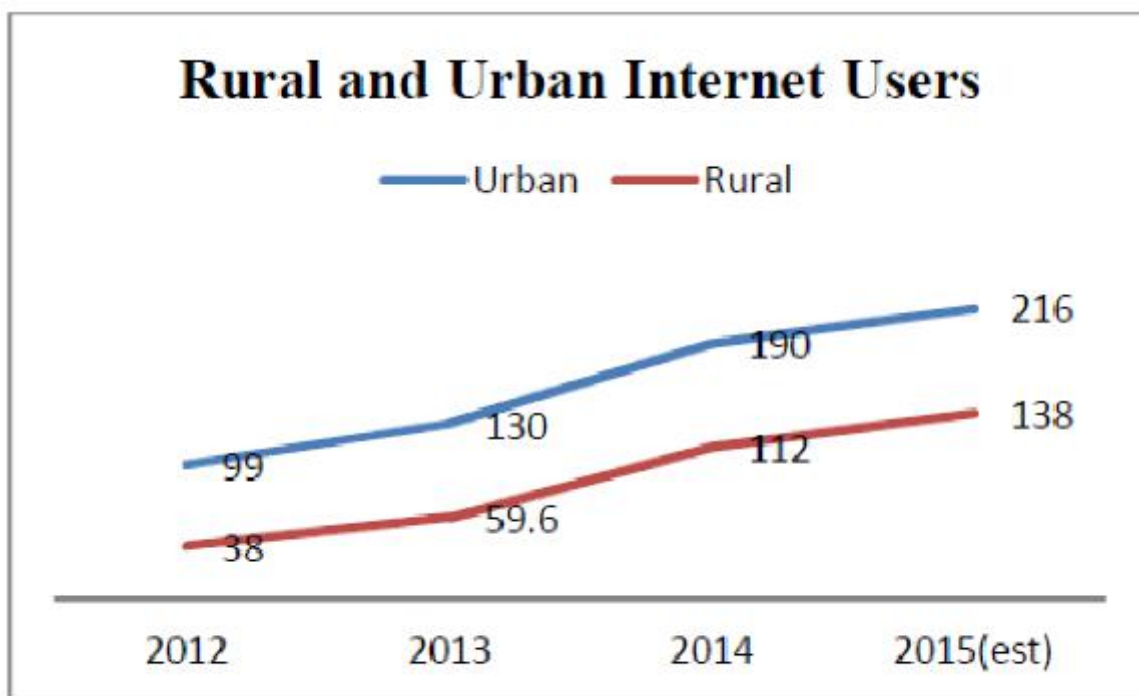


Figure-4: Sector Wise Internet Users.

The urban and rural population both are using internet facilities. The Internet in India took more than a decade to move from 10 million to 100 million and 3 years from 100 to 200 million. However, it took only a year to move from 200 to 300 million users. In October 2014, there were 278 million internet users in India. Currently, India has the third largest internet users' base in the world but it is estimated that by December 2014, India will overtake the US as the second largest Internet users' base in the world. China currently leads with more than 600 million internet users while the US currently has estimated 279 million internet users.



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According to the report, the number of internet users in urban India has grown by 29% from October 2013 to reach 177 million in October 2014. It is expected to reach 190 million by December 2014 and 216 million by June 2015. Significantly, compared to last year, in rural India, Internet users have increased by 39% to reach 101 million in October 2014. It is expected to reach 112 million by December 2014 and 138 million by June 2015 [IAMAI, 2013].

According to Telecom Regulatory Authority of India, total number of Internet subscribers has increased from 251.59 million at the end of Mar-14 to 259.14 million at the end of Jun-14, there has been a quarterly growth of 3.00%. Out of which Wired Internet subscribers are 18.55 million and Wireless Internet subscribers are 240.60 million [TRAI, 2014].

### CONCLUSION

The data given clearly illustrates that how e-commerce industry is rapidly growing in the developing country like India which has an immense potential for inline shopping as the population is young and enthusiastic and open to the innovative ways of shopping provided by Information and Communication Technology. The important fact is the shift from e-commerce to m-commerce, which has shown a remarkable growth and with this growing trend the future of e-commerce industry is very secure and bright. By the year 2019 it is expected that India will leave the countries like US and Japan and give a tough fight to China. The credit goes to the growing IT infrastructure and the user friendly ways of implementing it that's why everyone from urban to rural and technically known to comparatively less technical population are these days actively involved in the growth of the sector.

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