ROLE OF ICT IN E-COMMERCE BUSINESS IN DEVELOPING COUNTRIES

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ABSTRACT

ICT and e-commerce are inseparable terms as the e-commerce industry is absolutely dependent on ICT for its operations and intensification. e-commerce is also referred to as application of ICT in business and commerce. ICT 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 ICT being the precondition, lack of ICT infrastructure hampers the rate of its growth.

The growth of e-commerce is primarily dependent upon the boost in ICT 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 ICT and its services in driving e-commerce industry in developing countries like India and the shift from e-commerce to m-commerce in large scale in the near future.

Keywords: ICT; e-commerce; m-commerce, ICT

INTRODUCTION

Technology continues to be a transformative force and is changing the way individuals live, interact, and work. ICT had changed the approach of doing business globally and the scenario is identical for India and other developing economies. ICT 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 (ICT) which support all the activities and realms of business. 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, ICT is a leading one. ICT and e-commerce are inseparable terms as the e-commerce industry is absolutely dependent on ICT for its operations and intensification. The concept of e-business is very flexible and therefore covers all possible uses of information and communication technologies. ICT 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 ICT 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.

e-commerce focuses on the use of ICT to facilitate the activities and associations of the business with customers.

1.1. Classification 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

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manufacturer and consumer or retailer and consumer.

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.

**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.

**1.2 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:**

(i) Stock and Shares Trading
(ii) Real Estate
(iii) Travel and Tourism industry
(iv) Matrimony
(v) Job Portals. Etc.

**1.3 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 financial transactions over a mobile device like mobile phone or tablet.

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. Following images show growth in use of mobile users.

1.4 Mobile Banking Users.
1. Online Shopping Trends.

The e-commerce and online shopping 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.

2. 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. Customers find online shopping safe and secure and feel comfortable to give their details and make online. Following image shows global e-commerce revenues.

3. Growth Of Internet

![Global E-Commerce Revenues](image_url)
From 200 million internet users in 2013 to over 500 million internet users by 2017 — including 314 million mobile internet users — the growth story of mobile internet in India is on the upsurge.

This rate of growth of internet users is directly related with the growth of e-commerce business.

**Sector Wise Internet Users.**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2016a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World population</strong> [5]</td>
<td>6.5 billion</td>
<td>6.9 billion</td>
<td>7.3 billion</td>
</tr>
<tr>
<td><strong>Users worldwide</strong></td>
<td>16%</td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Users in the developing world</strong></td>
<td>8%</td>
<td>21%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Users in the developed world</strong></td>
<td>51%</td>
<td>67%</td>
<td>81%</td>
</tr>
</tbody>
</table>
### WORLD INTERNET USAGE AND POPULATION STATISTICS

<table>
<thead>
<tr>
<th>World Regions</th>
<th>Population (2017 Est.)</th>
<th>Population % of World</th>
<th>Internet Users 31 Mar 2017</th>
<th>Penetration Rate (% Pop.)</th>
<th>Growth 2000-2017</th>
<th>Internet Users %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1,246,504,865</td>
<td>16.6 %</td>
<td>353,121,578</td>
<td>28.3 %</td>
<td>7,722.1 %</td>
<td>9.4 %</td>
</tr>
<tr>
<td>Asia</td>
<td>4,148,177,672</td>
<td>55.2 %</td>
<td>1,874,136,654</td>
<td>45.2 %</td>
<td>1,539.6 %</td>
<td>50.1 %</td>
</tr>
<tr>
<td>Europe</td>
<td>822,710,362</td>
<td>10.9 %</td>
<td>636,971,824</td>
<td>77.4 %</td>
<td>506.1 %</td>
<td>17.0 %</td>
</tr>
<tr>
<td>Latin America / Caribbean</td>
<td>647,604,645</td>
<td>8.6 %</td>
<td>385,919,382</td>
<td>59.6 %</td>
<td>2,035.8 %</td>
<td>10.3 %</td>
</tr>
<tr>
<td>Middle East</td>
<td>250,327,574</td>
<td>3.3 %</td>
<td>141,931,765</td>
<td>56.7 %</td>
<td>4,220.9 %</td>
<td>3.8 %</td>
</tr>
<tr>
<td>North America</td>
<td>363,224,006</td>
<td>4.8 %</td>
<td>320,068,243</td>
<td>88.1 %</td>
<td>196.1 %</td>
<td>8.6 %</td>
</tr>
<tr>
<td>Oceania / Australia</td>
<td>40,479,846</td>
<td>0.5 %</td>
<td>27,549,054</td>
<td>68.1 %</td>
<td>261.5 %</td>
<td>0.7 %</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>7,519,028,970</td>
<td>100.0 %</td>
<td>3,739,698,500</td>
<td>49.7 %</td>
<td>936.0 %</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4. Shift From e-Commerce To m-Commerce

m-commerce (mobile commerce) is the buying and selling of goods and services through wireless handheld devices such as Mobile phones, Laptops and Tablets. It seems like only yesterday that e-commerce revolutionized traditional commerce. The desktop computer promised to liberate you from the need to visit a retail outlet. We have evolved to the next stage of commerce. Now, transacting from the desktop computer seems more like a restriction than liberation. It is the era of "commerce everywhere." Handheld devices that can access the Internet are revolutionizing "traditional" ecommerce.
5: Medium of Internet Access.

The shift to m-commerce is being driven by rising smartphone evolution. India ranks third among the top countries for smartphone users with an estimated 117 million subscribers, behind only China and the US. But the penetration of smartphones as a percentage of mobile users in India is pegged at just 10 per cent, the lowest among the top 30 smartphone markets. However, the fact that the smartphone penetration in the lowest in the country also means there is a lot of room for growth going forward.

Smartphone User Growth.

Global smartphone user base will grow 58% from 2016 to 2022. Smartphone penetration rate of population will increase to 44% worldwide in 2017, up from 39% in 2016. The penetration rate will further increase to 59% by 2022. In emerging markets, Central and Latin America will witness the highest smartphone penetration, followed by Asia Pacific. Africa Middle East region will post the lowest penetration rate. This extensive report forecasts global smartphone user population penetration for 88 countries worldwide, from 2007 to 2022. The countries are United States, China, India, Indonesia, Japan, South Korea, Russia, Brazil, Mexico, South Africa, Saudi Arabia, UK, Germany, France, Italy and Spain. stakeholders to determine the distribution of smartphone ownership across the huge global smartphone market.

6. 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 2017 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 ICT infrastructure.

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