RECENT TRENDS IN COMPUTER TECHNOLOGY FOR EFFECTIVENESS OF E-COMMERCE

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ABSTRACT

Today internet has exploded in the world and spreading its reach further than ever before as more and more pupils would like to purchase online either on computer or using their Smartphone's Computer Technology is the backbone of e-commerce. Likewise, it helps connect sellers and customer on mobile and web platforms, to enables the effective management of customer orders, deliveries, returns and payments of purchased products or services. The birth of companies such as eBay (launched in 1995), Amazon (launched in 1994) Flipkart(launched in 2007)really began to lead the way in E-commerce. The growth was driven by rapid technology adoption led by the increasing use of wireless devices such as (PDAs, Blackberry, Smart phones) cellular generations such as (SMS, 3G, 4G). Wireless computer network and internet access (Bluetooth, Wi-Fi, Wi-Max, and Hotspot). The current research has been undertaken to describe the scenario of the Recent Trends in computer technology to enhance E-Commerce and analyze the trends of E-Commerce and top reasons when India becomes a more successful country in E-commerce and also describe online retail rate spending in India between 2015 to 2020.

***Key Words** – Wireless Computer Networks, Technology, E-commerce Challenges*

1 INTRODUCTION

a) E-Commerce- E-commerce, also known as electronic commerce or internet commerce or e-market, refers to the buying and selling of goods or services using the internet, and the

transfer of money and data to execute these transactions. Ecommerce is frequently used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the electronic network.

The history of E-Commerce starts with the first ever online sale: on the August 11, 1994 a man sold a CD by the band Sting to his friend through his website Net Market, an American retail platform. This is the first example of a consumer purchasing a product from a business through the www or "ecommerce" as we commonly know it today.

Figure 1 Trade Cycle

More Definition is "E- commerce can be defined as the technology intervened exchanges between the parties as well as the electronic based inter organizational activities that facilitate such exchanges."
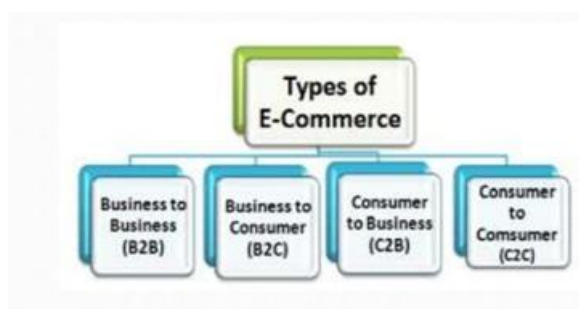
b) Types of Ecommerce

Figure 2 Type of Commerce

The main types of Ecommerce Models are **Business to Consumer (B2C): Business to Business (B2B): Consumer to Consumer (C2C): Consumer to Business (C2B):**

c) Traditional Commerce vs. E- Commerce

The vital point of difference between traditional commerce and E commerce are (1) Digital (2) Cheaper (3) Elimination of mediator (4) Financial transaction (5) speed (6) Empowerment (7) Personalization

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OBJECTIVE

(1) To describe the scenario of Recent Trends of computer technology to enhance E-Commerce.

(2) To find out the reason when India becomes more successful country in E commerce sector.

(3) To analyse the trends of Ecommerce or facilitators.

(4) To describe the relationship between business and consumers.

(5) To understand difference between online and digital transactions.

(6) To forecast via chart that online retail spending in India.

REVIEW OF LITERATURE

Abdul Gaffar Khan[1] (2016) has carried out a study to analyse the merits that ecommerce offers to our economy. The author also attempted to study the challenges of ecommerce in our economy. The growth of IT has really favoured the growth of financial sectors. The author stated that with an increase in the usage of smart mobile services and internet there is a chance of more security issues and fraudulent practices. The internet and network technologies have created a lot of significant changes in all of our daily life. The author stated that E-commerce has a lot of benefits which add value to customer's satisfaction. Ecommerce enables us to easily purchase goods and services using internet.

Dr. Rajasekar, S. and Sweta Agarwal[2] (March 2016) have carried out in their study to analyze the growth of E Commerce in India and the challenges of E Commerce in India. The author stated that it is noted that the buying trends during 2016 will witness a significant upward movement due to aggressive online discounts, rising fuel price and wider and abundant choice will hit the e-commerce industry in 2016.It observed mobile commerce (m-commerce) is growing rapidly as a stable and secure supplement to the e-commerce industry. Shopping online through smart phones is proving to be a game changer, and industry leaders believe that m commerce could contribute up to 70 per cent of their total revenues. In India roughly 60-65 per cent of the total ecommerce sales are being generated by mobile devices and tablets. Author also stated about the challenges of E Commerce in India that India has less credit card population, lack of fast postal services in rural India. Accessing the Internet is currently hindered down by slow transmission speeds, frequent disconnects, cost of Wireless connection and wireless communication standards over which data is transmitted. High speed bandwidth Internet connection is not available to most citizens of the nation at an affordable rate.

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RESEARCH METHEDOLOGY

The paper is purely based on secondary data and data which are collected by using Books, National and International Journals and other websites. Data is more incline towards, finding out the reasons how computer technology revaluated to enhance E commerce and why India is a hot destination of E commerce.

II. TECHNOLOGY TO ENHANCE E COMMERCE

The internet has revolutionised the way in when information is stored, exchange and viewed. It has opened new avenues for business. We are reaching an exciting new era for innovation and technology that is full of immeasurable ability and opportunity. Not only does this apply specifically to the internet, but goes beyond it in many areas of business and technology for the start-ups, investment and job market.

a) Internet: The internet as a technology infrastructure has the potential to be connected to any object, both fixed (stationary) or mobile. This includes products, devices, and objects of all kinds, shapes and sizes appliances, automobiles, buildings and other structures, wearable technology, mobile devices and much more. As the development of products connected to the internet increases, the demand for software and other technology to support it is imminent.

b) Security and Access Control: With the arrival of the Internet of Things and other key internet and technology trends, the need for new security and access control solutions will increase. Watch for this to also leap into the offline world as access control and security solutions evolve for the home, office, buildings of all kinds and vehicles across the spectrum for both consumers and businesses.

c) Digital Payments: Digital payment technologies have been gaining momentum for the past few years. The arrival of Apple Pay has sparked increased attention and movement in this area of technology business, and this will only continue in the future. Keep an eye also on new payment hardware solutions in addition to software, particularly around the connected home and retail business.

d) Social Media: The internet enables a wide range of communications capabilities. It has been predominantly text-based to date, but internet-based video and voice communications are also used and will only increase. While video communication has been relatively limited to laptops and traditional PCs, and voice to VoIP-enabled stationary telephones, all will move to mobile devices — as well as cars and other vehicles, buildings and more in the coming future. Watch also for the decline in use of both the traditional 'landline' and 'cellular' platforms, replaced by the internet for communications. While startups may struggle proliferating this market, there should be opportunity in creating new innovations for carriers in this space.

III. NEW TECHNOLOGIES ARE RESHAPING E-COMMERCE

Following are some technology which support to reshape E commerce

a) Augmented Reality (AR) Technology: Augmented Reality (AR) may not be as exciting as a virtual reality roller coaster ride, but the technology is proving itself as a very useful tool in our everyday lives. From social media filters, to surgical procedures, AR is rapidly growing in popularity because it brings elements of the virtual world, into our real world, thus enhancing the things we see, hear, and feel. When compared to other reality technologies, augmented reality lies in the middle of the mixed reality spectrum; between the real world and the virtual world.

b) Chatbots: A chatbot is artificial intelligence (AI) software that can simulate a conversation (or a chat) with a user in natural language through messaging applications, websites, and mobile apps or through the telephone. A chatbot is often described as one of the most advanced and promising expressions of interaction between humans and machines. However, from a technological point of view, a chatbot only represents the natural evolution of a Question Answering system leveraging Natural Language Processing (NLP). Formulating responses to questions in natural language is one of the most typical Examples of Natural Language Processing applied in various enterprises' end-use applications.

c) IoT: IoT is short for Internet of Things. The Internet of Things refers to the ever-growing network of physical objects that feature an IP address for internet connectivity, and the communication that occurs between these objects and other Internet-enabled devices and systems.

IV. E- COMMERCE IN INDIA

Top five reasons when India becomes more successful country in E commerce [21]

Technology led purchase revolution
A rise of digital wallets and online payments
Plenty of festive seasons in India
Indian shoppers enamoured with discounts
Leveraging the untapped power of small-town shoppers

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Table 1

Let us find out the factors why India is considered to be a hot destination for e-commerce as compared to the rest of the world.

a) Technology led purchase revolution: Shopping as an experience has changed in India. In earlier days, shopping was a fun and leisure activity enjoyed with family and friends. Today, it is a solo activity, digitally influenced and all about convenience. The concept of shopping anything-anywhere-anytime has given the boost to the e-commerce industry in India. All of this has been contributed by technology. A report says that by 2025, India is expected to have 850 million online users. It also revealed that between 2014 and 2016, the number of online buyers have multiplied seven-fold. This exponential growth has made India one of the largest consumer bases in the world.

b) A rise of digital wallets and online payments: Digital India campaign and demonetization has spelt wonders for the e-commerce industry. For convenience and safety, regular buyers are parking a fixed amount of money in mobile wallets like Paytm, Ola Money, Mobiwik, BHIM etc. and using it for quick payments. Even banks have come up with their online wallets. There is also growing awareness about using net banking and debit/credit cards. To capitalize on this popularity, mobile wallets and banks are also flooding users with cash back and discount offers.

c) Plenty of festive seasons in India: Being a land of diverse religion and faiths, India has festive and wedding seasons generously spread across the year. We all know that festivals and weddings are synonymous with shopping. It is a boom time for retailers and because people hardly head to malls these days, online selling is the best option. E-commerce is the now most preferred way of shopping for self and loved ones. According to Red Seer, in 2017, Festival season generated highest-ever monthly sales for Indian e-commerce at $3.2 billion.

d) Indian shoppers enamored with discounts: No one can deny that Indians find a sense of achievement if they are able to strike a hard bargain or negotiate a good deal. Online shopping in India thrives on deals, discounts and cash backs. **As per statistics from Coupons, India ranks as the highest user of coupons leaving countries like Brazil, Spain, Australia and Singapore behind.** Due to the growing access to a smart phone,

62% of Indians using coupons are on smart phones. This is again higher than Brazil (30%)

Spain (22%) Australia (28%) and Singapore (37%)

e) Leveraging the untapped power of small-town shoppers: India has a considerable population in small towns and villages. As per Red Seer, small-town Indians contribute around 41% of all online shoppers. With such a big share, there is a lot of scope and wide consumer base for e-commerce companies to hold ground. The leading players are already

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launching campaigns to tap the power of rural India. Amazon, under its Project Udaan, has partnered with small stores in rural India, where in shopkeepers guide customers to shop on Amazon. RedSeer also predicts that non-metro towns will account for 55% of all active online shoppers in 2020.
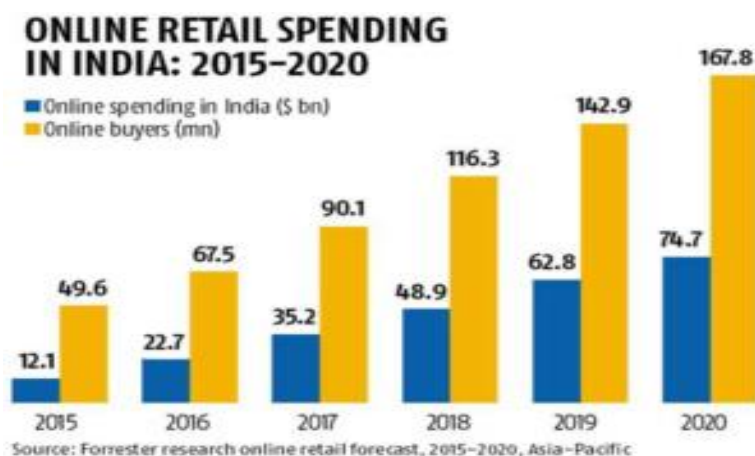

Figure 3[14]

CONCLUSION

E commerce is changing the shape and new concept of business that's a lot of growth and money if we are interested in doing business online. We need to know the ins and outs of the ecommerce industry. The research works on E-commerce propose good number of variables to be taken care of if marketers need to be successful in this newly business model they can used computer technology and wireless devices (PDAs, Blackberry, Smart phones)and cellular system(GSM,SMS,3G,4G,Hotspot) which is back boon of E commerce than we can say Computer Technology has play an very important role to enhance E commerce . Expert says it is evaluated that online buyers demand is more than spending supply in India. It is forecast research online retail in Asia Pacific that in 2015 online spending was just 12.1$ than buyers demand was 49.6$.And 2016 online spending was 22.7$ than buyers demand was 67.5$, and 2017 online spending was 35.2$ than buyers demand was 90.1$, In 2018 online spending was 62.8$ than buyers demand was 142.9$ may by this graph will be increase year by years. It reaches may be possible in 2020 online spending 74.7$ than buyers demand 167.8$. Now all things are changing we cannot predict what will happen in the future because "**The Only Thing That Is Constant Is Change**"

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