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THE ENCUMBERED GROWTH OF E-COMMERCE IN INDIA:

CAN WE HELP?

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ABSTRACT

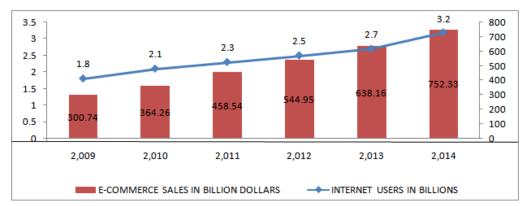
India has witnessed a drastic switch, in the purchasing and selling pattern of various goods and services, during the last 15 years. The introduction of e-commerce has revolutionized, both global and_domestic economies. A number of developed economies like the USA, China and the UK, have demonstrated a clear leadership in e-commerce, attributing to higher internet penetration, technological advancement, infrastructure facilities and the increased use of smart phones, laptops/PCs and tablets. However, India, being a developing economy, is experiencing a much slower growth of e-commerce, inspite of having a larger number of internet users, as compared to the top ranked e-commerce market, The USA. The very obvious reasons behind this stunted development are, India's infrastructural, social, legal and political drawbacks, which need immediate consideration so that, strategies could be devised to uproot those challenges, which are hampering the expected uptake of e-commerce in India.

This paper aims at presenting a comparative analysis, of the internet penetration and e-commerce growth, between India and top three countries, having the biggest eCommerce market in the world, i.e., USA, China and UK. The focus is on discussing those issues, which have hindered the e-commerce growth in India and suggesting few strategic measures, that are being followed by the e-commerce giants and it is expected that, few judicious policy implications will make India, a competitive e-commerce market in the near future.

KEYWORDS: E-Commerce, Internet Penetration, Network Connectivity, Payment Gateways, Logistics & M-commerce

INTRODUCTION

E-commerce, is the exchange of goods and services, using the capabilities of the internet (Shahar, 1997). This definition highlights the internet, as the leading factor responsible for the growth of e-commerce sector. A global data, on the number of internet users and e-commerce sales (figure 1) reveal that, they both increase hand in hand, that is, the growth in the number of users directly affect the volume of online transactions.



Source: Internet live stats, statista.com&wevio.com

Figure 1: E-commerce Sales and Number of Internet Users in the World

While, e-commerce has become a familiar part of life in developing nations, it is still considered an innovation in developing economies like India. Despite, having a large number of internet users and being the third largest smart phone market in the world (Mallya, 2015), the country has proceeded at a relatively slow pace, in the e-commerce area. At present, only a small number of business organizations and consumers, are using e-commerce as a preferred mode of exchange. A recent report titled 'India on the go-mobile Internet Vision', by IAMAI & KPMG said that, the overall internet user base in the country is expected to touch 503 million, by 2017, which stood at approximately 350 million, as on June 2015, that has made India, the second largest internet user base, in the world only behind China. It is among the three fastest growing markets, for internet usage worldwide, according to a study conducted by ASSOCHAM & Comscore, in October 2012. But, the Forrester Research estimates that, only 13.25% of the internet users in India, purchased products online in 2013 and this figure is expected to rise to 28%, by 2017. This is only a small proportion and if all the internet users in India, would have involved in online shopping, the Indian e-commerce market holds the potential to surpass that of the USA.

No doubt, the annual growth rate shown by Indian e-commerce industry, during the past decade is appreciable, still India holds 83rd rank, out of 130 in the global e-commerce market, according to the UN Conference on Trade and Development. So the questions, which naturally arise, are: why Indians have been so reserved in adopting e-commerce channel? What are the factors that are creating hindrance in the way of e-commerce, to expand to its maximum capability?

This paper contributes towards addressing the above questions and highlighting few major challenges, faced by the e-commerce growth in India, along with some suggested measures, to overcome these hindrances.

Objectives

- To study the present scenario of e-commerce in India.
- To justify that internet is the most important factor, that is driving the e-commerce growth.
- To present a comparative analysis, between India and top three e-commerce markets of the world.
- To identify factors that hampers the e-commerce growth in India.
- To suggest a few strategies, that could help Indian e-commerce market, to tackle those challenges.

LITERATURE REVIEW

E-commerce, is a general term for any type of commercial transaction or business, that involves the transmission of information over the Internet. Or e-commerce, can be defined as the use of computers and electronic networks, to carry out business with other businesses (B2B), or with customers (B2C) over the internet, or other electronic network.

According to the definition given by US Executive Office of the President, "e-commerce", is a commercial interaction over the internet, which can lower costs dramatically and facilitating new types of commercial transactions. As the internet empowers citizens and democratizes societies, it is also changing classic economic paradigms. New models of commercial interactions are developing, as businesses and consumers participate in an electronic marketplace, and reap the resultant benefits. The internet has the potential to revolutionize retail marketing. Commerce, on the internet could total tens of billions of dollars, by the turn of the century. (UNCTAD, 2000)

Rosen (2002), states that, e-commerce refers to the online business activities for products and services, and it is useful for any form of business transaction in which, the buyers and sellers interact electronically, rather than by direct physical contact.

According to Laudon &Traver (2008), e-commerce is the use of the internet and the web, to conduct business, that is, it's a digitally supported commercial transaction, among businesses and individuals.

Another definition states that, e-commerce is the process of buying, selling or exchanging products, services or information, based on the following existing conditions in the developing countries: 1) availability of the Internet and e-mail in these contexts and will be used to communicate business transactions, and 2) use of the World Wide Web to enhance business activity (Turban, King, McKay, Marshall, Lee, &Viehland, 2008).

From the above definitions, we can say that, the working of the e-commerce highly depends upon the internet and World Wide Web. The Internet is a global network of interlinked computers, and, the World Wide Web is a global collection of electronic documents (Holden, Belew, Elad, & Rich, 2009, p. 3), that supplements a graphical element to the Internet (Senn, 2004, p. 86). In other words, the internet can be regarded as the backbone of e-commerce.

E-commerce, is fundamentally changing the economy and the way in which businesses are conducted today (Barua *et.al.*, 2001). It compels the firms, find new ways to expand their markets, to attract and retain the existing customers, by modifying products or services, according to their needs and restructuring their business operations, to deliver high quality products and services, more efficiently and effectively (Chan & Davis, 2000).

Apart from the studies mentioned above, there are a number of research reports and survey based studies, done by IAMAI, IMRB International, PwC, ASSOCHAM, BCG, Internet & online Association, etc., which presents the status of ecommerce, existing in the country with quantitative figures.

RESEARCH GAP

Various studies as stated above, discuss one or the other aspects of e-commerce. Much work has been done, with respect to the concept, origin and growth of ecommerce, as well as the major factors which have driven this growth. The review of the available literature suggests that, there are many challenges in Indian context, which are creating hindrance in the way of e-commerce penetration, because India's economy, geography and demography is very different from that of western countries. Thus, the present study intends to identify those challenges, which are hampering the e-commerce

growth in India, and suggest a few strategies which could help online market, to expand to its full potential.

Contribution of the Study

This descriptive research work would help to identify those factor,s which are hampering the growth of ecommerce development in India and how could these obstacles be tackled with the successful implication of the few measures discussed alongwith. This will help the ecommerce firms, to expand their online businesses and become profitable in near future.

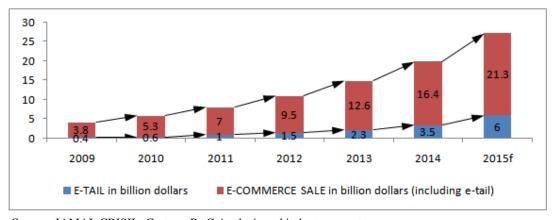
METHODOLOGY

It is a **descriptive survey**, that is **exploratory cum applied** in nature. It's based on the analysis of **secondary data** and generalizing conclusions from them. It is important to flag that, the secondary data is used here, which refers to a period from **2009 to 2014** and is availed from various journals, reports, magazines, books and internet.

Data analysis, is done using statistical techniques. **The linear regression tool** is employed on the quantitative data, to surface the relationship between e-commerce and internet usage. **SPSS software and MS-excel** is used for efficient data analysis. The data has been depicted in the form of charts and tables.

CURRENT SCENARIO OF ECOMMERCE IN INDIA

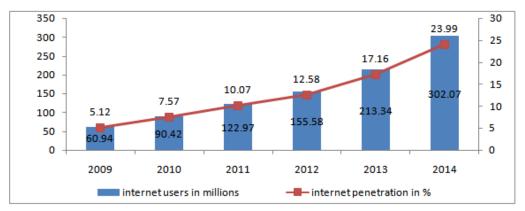
Online commerce, in India, is riding on the high pace at a growth rate of 60-70%, annually, to capture the market which has a huge hidden potential. E-commerce, in India has progressed significantly, in the last decade and what is interesting is that, the entire evolution of e-commerce in India happened over 15 years. In advanced markets like the USA, it took over 50-60 years. The Indian e-commerce sector has seen a remarkable growth, in 2014. Rana Kapoor, the President of ASSOCHAM India, quoted in a report *Future of e-commerce: Uncovering Innovation*, "Increasing internet and mobile penetration, along with the growing acceptability of online payments and favorable demographics, has enriched the e-commerce sector in India, with the unique opportunity to fundamentally alter the way, companies connect with their customers. Due to this digital revolution, the e-commerce sector in India become 4 times its size, from \$3.8 billion in 2009 to \$17 billion in 2014, growing at a CAGR of 37%. It is expected that, the sector will cross the \$100 billion mark by 2020 and will contribute over 4% to India's GDP."



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

Figure 2: India's E-tail and E-commerce Growth

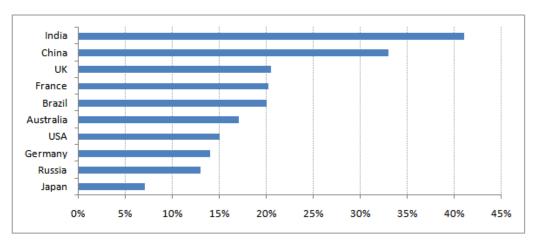
According to Forrester Research, only 17% of India's total population in 2013, was online and out of it only 14%, or 28 million people were online buyers. This figure raised over to 40 million, as the level of internet penetration rose to 24%, in 2014 and with a gradual increase of 27%, in the number of internet users, during the first half of 2015, the total internet subscribers in the country crossed 350 million, with around 27% penetration and this will result in the further increase of online buyers. According to the PwC report, *Future of India - The Winning Leap*, introduction of new technologies, especially laptops, tablets and mobiles, have brought a social change in India, that is difficult to enumerate.



Source: Internet Live Stats & Statista.com

Figure 3: Number of Internet Users & Internet Penetration in India

According to KPCB, partner Mary Meeker's 2015 Internet trends report, India is the largest country in terms of new Internet user additions, by adding 63 million Internet users by the end of 2014, that is more than double of China, which added 31 million Internet users, during the year. The report also stated that, 41% of total e-commerce sales in India come from mobile devices, which indicate that, India is the leader in the use of mobile devices for e-commerce transactions.



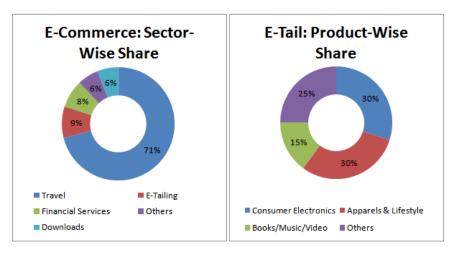
Source: Stanley Morgan Research & KPCB

Figure 4: Mobile as % of Total E-commerce Sales, 2014

The number of smart phone users is expected to grow at a CAGR, 91%, from 2012 to 2016, when it jumped from 29 million to 382 million. Similarly, the number of 3G subscribers could expand at a CAGR, of 84% from 23 million to 266 million, during the same period, revealed the report by PwC, *E-commerce in India: Accelerating Growth*. Mobile

commerce is also growing rapidly, as a steady and safe supplement, to the e-commerce industry.

Travel, is the most profitable sector in India's e-commerce, with around 71% share. This business has grown at a CAGR of 32%, over 2009-13. According to the report, *Future of e-commerce: Uncovering Innovation* by ASSOCHAM, currently, the Italian market in India accounts for only 8.7%, of organized retail in \$1.6 billion, which is just a miniscule fraction of India's overall retail industry, that stands at \$500 billion; retail e-commerce has achieved a three times growth since 2011, that is mainly driven by million dollar investments, initiated by domestic and foreign investors. In the coming few years, E-tail is set to spring up to \$6-8 billion. E-tailing, has become the fastest growing segments in the larger markets, having grown at a CAGR of around 56%, over 2009-14. Apparels & accessories, electronics and books are the highest selling products through the internet, constituting around 30% of the product distribution.



Source: Technopak Analysis

Figure 5: E-commerce & E-tail in India

Undoubtedly, India is one of the most rapidly growing e-commerce markets, in the world and holds the second position, only after China with 31.5% annual growth rate, it is still almost 10 years behind China in the e-commerce space.

Today's consumers are highly pressurized, due to scarcity of time as well as they are attracted by the convenience and increased use of plastic money, thus, making their way towards more online consumption. Furthermore, favourable demographic profile, limited geographical accessibility by brick & mortar retailers, increase in internet penetration, increased use of smartphones & reducing data charges, are the basic factors that offer high market potential for e-retailing, in India.

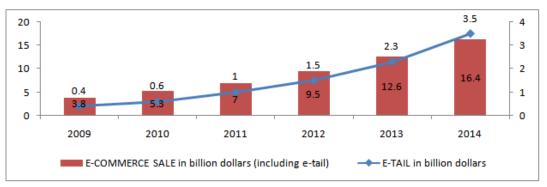
The Modi Government, has initiated the ambitious 'Digital India' project, with an aim to offer a one-stop shop for all the Government services. This will further boost the sector, by introducing internet and broadband, to each and every remote corner of the country, and will thus help to increase trade. This initiative has proposed an investment, of nearly \$17 billion and it is expected that, this will definitely transform India into a connected and developed economy. It would also attract foreign investments and create millions of jobs.

Although, it has been 15 years, since the e-commerce trend is making rounds in India, but the appropriate ecosystem has now started to take its place. Moreover, the Indian e-Commerce market has enjoyed an extraordinary growth, of almost 50%, in the last five years. Factors like increasing internet access, astounding penetration of mobile

phones and healthy investment, have driven the growth of this industry and if current projections continue to go by, India is on the verge of becoming the world's fastest growing e-commerce market.

DATA ANALYSIS

The review of the available literature states that, the growth of Indian e-commerce industry is very high. However, its growth depends upon a number of factors, the most important among which is internet connectivity. The growing number of internet subscriber base, due to increased availability of broadband, 3G and 4G data facilities has been the foremost reason, for the swift growth witnessed in e-commerce sales volume. The high rate of the adoption of the internet and smart phones, is the biggest reason for the growth of e-commerce in India. The growth trend between the number of internet users and the e-commerce sales volume, in India, during the period of 2009 to 2014, is shown in the following figure:



Source: IAMAI, CRISIL, Gartner, PwC analysis, Internet lives stats & EKOS global & Wikipedia Figure 6: E-commerce Sales & Number of Internet Users in India

Analyzing the evolution and trends, in the volume of e-commerce sales in the market, it should be highlighted that, a strong growth has been experienced in the recent years, which runs parallel to the increasing number of internet users in the country. To analyze the degree of relatedness, between the two variables, a simple linear regression statistical technique is applied to the available data, in which, the e-commerce sales volume is taken as the dependent variable, that gets affected to a considerable extent, by the increasing number of internet users. The output generated by the SPSS software, through the above data is given below:

Model Summary Adjusted R Model R R Square Std. Error of the Estimate Square 996a .993 991 .45568 a. Predictors: (Constant), NO. OF INTERNET USERS Coefficients Unstandardised Standardized Coefficients Coefficients Model Sig. B Std. Error Beta 408 .177 Constant) .668 1.637 No. of Internet .054 .002 .996 23.205 .000 Users a. Dependent Variable: E-COMMERCE SALE

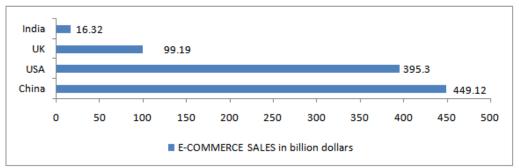
Table 1

From the above output, the co-efficient of correlation comes out to be 0.996, which signifies that a very high

degree of positive correlation exists, between the two variables, that is, the e-commerce sales volume experiences an upward growth, as the number of internet user's rise in the country. This reveals that, the growth in the use of the internet positively influences the development of e-commerce.

Undoubtedly, the current value of the Indian e-commerce industry, is the outcome of the fact that, India is witnessing a rapid growth in the number of internet subscribers, since last few years. Indeed, India is lucky to have around 302 million internet users (as in 2014), that is the second largest internet user base in the world, only behind China when it surpassed that of USA, in December 2014.

Still, the rate of internet penetration is quite low and the e-commerce sales volume is far behind the top three e-commerce markets of the world, the USA, China and the UK. In comparison to these countries, India ranks 83rd out of 130 global e-commerce markets.



Source: reports by Internet World Stats, statista.com, EKOS, forester researcher and marketer **Figure 7: E-commerce Sales in India & Selected Countries**

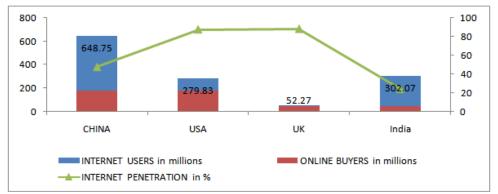
The following table, presents a comparison among the top three global e-commerce giants, and India. The data presents the situation, as of December 2014.

Table 2

	CHINA	USA	UK	India
POPULATION	1367.82	318.86	64.77	1259.70
(In millions)	1307.02	310.00	01.77	1237.70
INTERNET USERS	648.75	279.83	57.27	302.07
(In millions)				
INTERNET	47.43%	87.76%	88.40%	23.99%
PENETRATION				
ONLINE BUYERS	178.41	176.29	41.81	40.02
(In millions)				
ONLINE BUYERS	27.43%	62.85%	73.68%	13.25%
(As % of internet users)				
COUNTRY'S SHARE OF				1
WORLD INTERNET	21.97%	9.58%	1.88%	9.81%
USERS				
TOTAL				
E-COMMERCE SALE (in	\$449.12	\$395.30	\$99.19	\$16.32
billions)				
RANK IN GLOBAL				
E-COMMERCE	1	2	3	83
MARKET				
RATE OF				
E-COMMERCE	63.8%	11.8%	12.2%	31.5%
GROWTH				
RANK IN EC GROWTH	1	7	6	2

Source: reports by Internet World Stats, statista.com, EKOS, forester researcher and marketer

An empirical analysis of the above table highlights that, India is the second most populated country and the second largest internet user base of the world, stores an immense unidentified opportunity, to overtake the total ecommerce sales in the USA. But, in India, the internet penetration is quite low; moreover, people mainly use the internet for activities like sending emails, playing games, using a search engine to find information and social networking. Only 13.25%, of the total internet subscribers, use it for online buying. As a result, total e-commerce sales in India, are just approximately, 4% of that, in the USA, 8%, of that, in China and 16% of that, in the UK. In contrast to it, the UK & the USA have much lower population, but their internet penetration is much higher, as illustrated in the following figure:



Source: reports by Internet World Stats, statista.com, EKOS, forester researcher and marketer Figure 8: Internet Penetration in India & Selected Countries (Dec 2014)

Thus, it is justifiable to say that, reaching a significant group of prospective customers who are consistent users of the internet, may convert this mass of users into a large market, to become profitable enough, and subsequently attractive to firms.

"Technological disruption has driven change, in the e-commerce industry with shoppers embracing multiple touch points, in their purchase journeys. Overall, there is the humongous potential of the e-commerce companies, helped strongly by a growing internet user base and advancements in technology. However, this will not be without its share of challenges –operational, regulatory, digital, etc. A company's ability to prepare itself, proactively to meet these challenges will decide the difference between a successful venture and a failed one" remarked Sanded Ladder ,(Technology Sector Leader, PwC India) "It's (e-commerce) taking off in India and you have some companies like Flipkart, that are getting through, but at the aggregate level, India is still a small player, though the potential is very big in India", said Torbjorn Fredriksson, chief of the Information and communications technology analysis, at UNCTAD.

A report, 'Major challenges faced by e-commerce industry in India' by mavens (2012) writes that, the Indian e-commerce industry is flourishing at a remarkable pace, owing to high penetration rate of internet and advanced electronic devices. Still, the current growth rate of e-commerce in India, is far lagging behind than other developed countries. There are many major obstacles and challenges, faced by an online merchant.

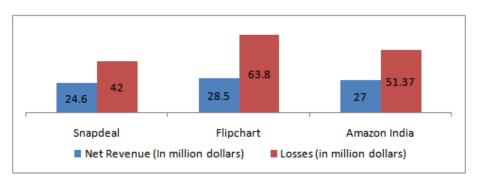
Thus, there is a need to discuss those challenges and devise strategies, to tackle them so as to ensure a better e-commerce growth. Discussion of these challenges and measures, for the betterment of e-commerce is the task of the following sections.

DISCUSSIONS & RECOMMENDATIONS

• Challenges To E-commerce Growth in India

The rapid growth of eCommerce in India is attracting massive attention of many e-commerce merchants, around the globe. India is the second most populous country in the world, with 1.2 billion people and the number of internet users in India, is also the second largest in the world. This shows that, India hides an immense potential for the growth of e-commerce and this makes India, one of the most appealing emerging markets for ecommerce, despite of having lower per-capita purchasing power. But India is far from being a bed of roses. Following, are the top challenges confronted by the online businesses in India.

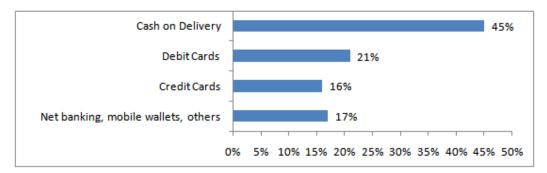
- Network Connectivity and Internet Penetration is Low: Internet is the foundation of e-commerce. Disappointingly, Internet penetration in India is still 24%, which is just a small, miniscule of what could be found in several other western countries. Moreover, the average speed of internet in India is only 2.3 Mbps, which is quite low as compared to 17.4 Mbps, in developed countries. Besides, the cost of internet access is also high.
- Problem of Logistics and Reverse Logistics: In India, metropolitans and other major cities have fairly robust
 logistic facilities, but there are thousands of towns, that are not easily accessible. Furthermore, the rate of goods
 returned by the customers is very high and for the e-commerce retailers, these returns are extremely expensive,
 since the cost to manage the return can be higher than the value of the product.
- Impractical Policies Negatively Affect Profitability: To face the intense competition, among the eCommerce
 retailers who are doing the same business, vendors adopt aggressive pricing strategies, heavy discounts and offer
 coupons, free shipping, etc. This is the reason that, even the firms like flipkart and snapdeal are yet to reach their
 break-even points.



Source: Various Industry News

Figure 9: Annual Results of Top E-commerce Companies, FY 2014

• Limited Use of Debit/Credit Cards and Net Banking Services: In India, most of the customers do not have access to credit card, debit card and net banking services, this is one of the prime reasons to restrict the development of eCommerce. Cash on Delivery, is the most preferred mode of payment, which has many adverse issues related to it, like high direct and indirect costs, security concerns and problem of reverse logistics arising from CoD defaults.



Source: IAMAI

Figure 10: Various Modes of Payment in India

- Absence of Consistent Cyber Laws: Privacy, is a significant issue of concern, for both current and prospective eCommerce customers. The Indian customers are quite hesitant about giving their personal details, due to the increasing risk of scams, played by hackers. To regulate transactions on the net, the Indian parliament passed The Information Technology Bill, on May 17,2000. But, as it stands today, this Bill does not pay attention towards cases such as, individual property rights, content regulation to privacy and data protection specific legislation.
- Digital Illiteracy and Unique Consumer Psyche: The Indian consumers have little knowledge about the use of
 the internet, for purchasing. They are more convenient in buying products from nearby brick & mortar stores.
 Companies that deal with products like apparels, handicrafts and jewelry, face major challenges to sell their
 products, as the buyers prefer to see and touch the product before they purchase.
- Lack of Trust and Confidence: Trust, is very important in an e-business activity, which is based on various
 factors like brand recognition, product description, payment related issues, terms and conditions, money back
 guarantee, return and exchange policy, etc. Lack of trust, by consumers often results in a heavy loss of goodwill
 and revenues.
- Lack of Quality Standardization and Product Specification: Customers often face a problem, when an online
 ordered product does not match its specifications. That's why, people often hesitate to order those products, which
 carry little specialization like that in the case of clothes or footwear, where it is not sure that, a particular size of a
 dress would actually fit or not. Thus, having a global standard, regarding the size of these products would help to
 reduce this doubt in the customer's mind.
- Lack of Proper Website Management: Most of the websites don't carry any digital datasheet, nice looking photographs for their products, mechanism to check for daily prices and product availability. Information overload is another major problem, associated with the rapid growth of the web contents. When customers try to find something for online shopping, they get frustrated with a number of popup and banner ads, interrupting them. This only makes customers switch to other sites, or drop their purchase decision.
- Tax Structure: In India, the tax structure differs from sector to sector. This factor generates accounting problems
 for the Indian online businesses. Besides, there are few other countries like the US, which sustain zero duty on ecommerce, to prosper it in the country.

There is a huge possibility, for ecommerce companies, due to the flourishing internet user base and advancements in technology. However, this will come with its proportion of digital, operational or regulatory challenges. Company's

preparation to tackle these obstacles will decide its success. Therefore, it is important to trounce difficulties in Infrastructure, Financing, Logistics and Consumer Loyalty, to escort the next surge of sustainable growth in e-commerce. Appropriate laws for e-commerce, are required to tackle the issues in legal and regulatory structure. Banks, also need to play a lead role as, 'Facilitators', to offer cost effective cash management solutions, safe and secure payment gateways and other related banking services.

Suggestions for the Success of E-commerce

Although, many e-commerce companies are initiating to take benefit of the potential of the online environment in India, there are many crucial challenges, which remain to be tackled before e-commerce would prove to be an asset, for the people. Few of the above mentioned challenges are impossible to remove, in near future, owing to external factors which are not under the control of business owners, but we can work around and solve many others. Here are a few strategies, which could be followed:

- Customer Experience: As the customer moves forward from research to purchase fulfilment stages, their
 anticipations change rapidly, so E-commerce vendors need to know and appreciate these expectations, and devise
 their policies according to it. Convenient channels, for delivery and returns need to be build up, along with the
 specification of touch and feel, of the merchandise before purchasing. Online product reviews and ratings, more
 advanced sizing and fitting tools along with supporting videos, should be provided.
- Addressing Logistics: The Indian e-Commerce sector, needs to carefully observe the expansion of their marketplaces, in the Tier 2 and 3 cities. The brand image of e-commerce ventures gets stained due to the shortage of adequate logistic services. The prominent problems faced in e-commerce and logistics are, untimely or no delivery, damaged or lost parcels, unfriendly attitude of delivery staff, lengthy and complicated return procedures and no allied facilities such as, installation of the product. To handle such problems, vendors should either set up their own logistics system, or get hold of the existing logistics providers. Strategic alliances, among e-commerce firms and third-party logistics could produce better results.
- Tax and Regulatory Environment: Laws regulating e-Commerce in India, are still developing and do not have
 precision. An encouraging regulatory atmosphere would be a crucial step, towards unleashing the ability of eCommerce and bring effectiveness in processes, creation of new jobs, development of the industry and
 investments in infrastructure.
- Operational Framework: Various business models have been developing fast, in the e-Commerce sector, mainly
 due to increased competition and incapability of the vendors, to prolong high costs. E-commerce firms need to
 adapt and innovate regularly, to continue with their enterprises.
- Digital Infrastructure: Digital interruption has brought transformation in the e-Commerce sector, with buyers
 adopting multiple touch points in their purchases. Companies need to spend adequate finance on technological
 advancements and advertisements. During the voyage of digital business transformation, entrenching SMAC
 technologies in the business are very important.
- Localization of Internet Content: English, is still not widely used in India. Spokesperson of Google India says that, search of web contents in Hindi has grown 155% in the past year. Localization of content on the internet, is a

unique innovation. Snapdeal and MakeMyTrip have already introduced their multilingual interfaces, in regional languages, others also need to follow the trend.

- Analytics & Personalization: Personalized product suggestions, do not directly amplify the trust of the
 customers, but they do express that, the online vendor is making best efforts to understand the needs of the
 customers and is trying upon them. This implicitly builds the confidence level, that the retailer is not just acting to
 sell its products, but is making a sincere attempt to build direct relationship with its customer.
- Fraud Protection: An online retailer should setup suitable security certificates, to deal with the transactions related to the checkouts and the private information, about customers and payment details should be stored in coded format. A customer will feel more comfortable, if they will be charged after their order ships. So, it will be beneficial for the retailers, to reflect the amount of payment at the time of order, but charge the card only when the order ships.
- Inclusion of M-Commerce: Currently, e-commerce uses PCs and browser-based interface, but in the near future, it is expected that, Smartphone will rule the online transactions, owing to the increasing sales of Smartphones. So, it will be beneficial for the e-commerce vendors, to develop easy to use mobile apps, if they want to increase the reach of their website.
- Omnichannel Retailing: Omnichannel or multichannel retailing means, the use of more than one channel of
 retailing in the customer's shopping venture, which includes retail stores, online stores, mobile app stores, mobile
 stores, telephone sales and other methods to transact with the customers. Many of the vendors like, Walmart,
 Target and Costco, have already introduced this method of retailing; others are also advised to mount on this
 technological bandwagon.

The ambitious 'Digital India Project', launched by Modi Government and the advancement of 'India Post', is expected to positively affect the e-commerce industry. The Digital India Project aims at offering a one-stop shop, for all government activities and will have the mobile phone, as the backbone of all functions. This program is expected to give a robust lift, to the e-commerce sector as the initiation of the internet and broadband, to distant corners of the country will increase customer awareness, as a result online trade will rise. The government is also enthusiastic, to develop its own distribution channel, for India Post and other services related to eCommerce, since India Post transaction business valued 280 crore INR, in the CoD segment for e-commerce firms, such as Flipkart, Snapdeal and Amazon. Both the two projects are expected to have considerable effect, on increasing the access of e-commerce players, to generally non-accessible areas, thereby boasting the e-commerce growth.

Remarking upon the solutions for the problems, faced by the Indian e-commerce industry, K S Bhatia, The Founder & CEO Pumpkart.com said at RMAI Rural Conclave 2015, "We need a strong presence of government with a partnership of private for better logistics development in the country. We need to work together as partners in the process of development not just for the businesses but also in the rural areas of the country that will benefit from our presence."

CONCLUSIONS

E-commerce, is the future of shopping in India. It would be apt to quote, William Gibson's line," The future is here. It's just not widely distributed yet." The Internet economy will continue to grow robustly; internet users would buy more products and more frequently online: both new and established companies will reap profits from it.

Online shopping, has great potential in India. This holds true, especially when real estate costs are skyrocketing, more and more websites are being launched on a daily basis, offering various products and services. This, coupled with the favourable demographic dividend (young population, rising standards of living and upwardly mobile class) and rising internet penetration, strong growth in e-commerce is expected.

E-commerce, has wide scope of study, especially in developing countries like India. Internet is being given much attention, as it is an important factor, which has significant impact on online sales. In this paper, various challenges have been listed, which hamper the growth of e-commerce in India, and few strategies have also been suggested, which could drive the e-commerce revenue. E-marketers, should try to address these factors and develop appropriate marketing strategies, to convert prospective customers to active ones, while retaining their existing customers. We need to update ourselves, to greet e-commerce and reap its benefits.

Limitations of the Study

This study, is based on the facts and figures collected through various secondary sources like newspaper reports, articles and journals. The measures suggested above, to out stretch the reach of eCommerce activities in India, are based on the analysis of recent trends, followed by other countries to extend their online activities. There is a possibility that, these suggestive measures might not prove relevant in Indian context.

Scope for Further Research

This research is descriptive in nature; hence, few strategies are suggested here, to help eCommerce companies flourish to its fullest potential. There is a need for further researches, to prove the relevance of these strategies for the growth of eCommerce in India.

REFERENCES

- ASSOCHAM-Deloitte study 'E-commerce is India's new sunrise industry; set to reach USD 16 billion this year'
 accessed on 21/10/15 fromhttp://www.business-standard.com/article/news-cm/e-commerce-is-indias-new-sunrise-industry-set-to-reach-usd-16-billion-this-year-assocham-deloitte-study-115040900372_1.html
- ASSOCHAM report 'e-Commerce in India: Accelerating growth' accessed on 27/05/15 http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf
- 3. ASSOCHAM report 'Evolution of e-commerce in India: Creating Bricks Behind Clicks' accessed on 12/02/15 from https://www.pwc.in/assets/pdfs/publications/2014/evolution-of-e-commerce-in-india.pdf
- 4. A.T. Kearney: Top 20 e-commerce markets of the globe, (2015) accessed on 21/10/15 from http://www.consultancy.uk/news/1947/at-kearney-top-20-ecommerce-markets-of-the-globe
- 5. Barua, A; Konana, P., Whinston, A. B., and Yin, F. (2001), Driving e-business excellence, MIT Sloan Management Review, Fall 2001, pp. 36-44.
- Bhupta, M. (2015), India set to become world's fastest growing e-commerce market, accessed on 12/08/15 from http://www.business-standard.com/article/companies/india-set-to-become-world-s-fastest-growing-e-commerce-market-115020601227_1.html
- 7. Chan, S., and Davis, T. (2000), Partnering on extranets for strategic advantage. Information Systems

- Management, Vol. 17, No 1, pp. 58-64
- 8. Debbarma, S.et al. (2014), Promoting eCommerce in India: Main issues and Challenges, International Journal of Computer Science and Technologies, Vol.5 (6), 7371-7375.
- Deloitte & ASSOCHAM study 'Future of e-Commerce: Uncovering Innovation' accessed on 20/08/15 from http://www.assocham.org/upload/event/recent/event_1113/Background_Paper_Future_of_e-Commerce_web.pdf
- 10. E-commerce in India, a report by Ekos Global, accessed on 21/10/15 from http://www.ekosglobal.com/markets/asia-and-australasia/india/
- 11. Gangeshwer, DK., E-Commerce or Internet Marketing: A Business Review from Indian Context, International Journal of u- and e- Service, Science and Technology, ISSN: 2005-4246, Vol.6, No.6 (2013), pp. 187-194
- 12. Holden, G., Belew, S., Elad, J., & Rich, J. R. (2009), E-Business. New York: John Wiley & Sons, Inc
- India's Internet User Base at 350 Million, to Reach 503 Million by 2017: Report by Press Trust of India, 20 July 2015, accessed on 21/10/15 from http://gadgets.ndtv.com/internet/news/indias-internet-user-base-at-350-million-to-reach-503-million-by-2017-report-717668
- 14. Jain, S. (2015), Challenges and solutions to e-commerce in rural India- K S Bhatia, Pumpkart.com, accessed on 09/09/15 from http://everythingexperiential.com/challenges-and-solutions-to-e-commerce-in-rural-india-k-sbhatia-pumpkart-com/
- 15. Kaur, B., Madan, S. (2013) Factors Influencing Trust in Online Shopping: An Indian. European Journal of Business and Management, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Volume 5, Nov.29, 13
- 16. Khan, M. S. And Mahapatra, S. S. (2009) "Service quality evaluation in internet banking: an empirical study in India", Int. J. Indian Culture and Business Management, vol. 2, no. 1, pp. 30-46.
- 17. Khurana, A. (2013), 8 Challenges for Ecommerce in India, accessed on 09/09/15 from http://blogs.pb.com/ecommerce/2013/12/23/8-challenges-ecommerce-india/
- 18. Lal, K. (1999). Determinants of the adoption of Information Technology: a case study of electrical and electronic goods manufacturing firms in India. Research Policy, 28,667-680.
- 19. Laudon, K. C. & Traver, C. G. (2008). E-commerce, business. Technology. Society. (4th edition). Pearson Education International
- Major Challenges faced by the eCommerce Industry in India, a report by mavens, September 28, 2012, accessed
 on 09/09/15 from http://www.emavens.com/blog/ecommerce-2/major-challenges-faced-by-ecommerce-industryin-india/
- Malhotra, B. (2014), E-Business: Issues & Challenges in Indian Perspective. Global Journal of Business Management and Information Technology., ISSN 2278-3679 Volume 4, Number 1, pp. 11-16
- 22. Mallya, H. (2015), With 3rd largest smartphone market in the world, India to reach 314 million mobile internet users by 2017, accessed on 01/09/15 from http://yourstory.com/2015/07/mobile-internet-report-2015/
- 23. Raven, V., Huang, X., & Kim, B. (2005), E-business in Developing Countries: A comparison of China and India,

- IGI Global, 2025-2043
- 24. Rosen, A. (2002). The E-commerce question and answer book: a survival guide for business managers, (2th edition), AMACOM, New York.
- 25. Senn, A. (2004), Information Technology: Principles, Practices, Opportunities. 3rd Ed. Upper Saddle River: Pearson Education, Inc.
- 26. Sinha, DK., 7 Challenges Faced by E-Commerce in India, accessed on 09/09/15 from http://www.yourarticlelibrary.com/business/7-challenges-faced-by-e-commerce-in-india-explained/41228/
- 27. Statistics and facts about e-commerce in India, report by statista.com,, accessed on 02/09/15 from http://www.statista.com/topics/2454/e-commerce-in-india/
- 28. Turban, E., King, D., McKay, J., Marshall, P., Lee, J., & Viehland, D. (2008). Electronic Commerce: A Managerial Perspective. Upper Saddle River, NJ: Pearson Prentice Hall
- 29. UNCTAD, (2001), E-Commerce and Development Report. United Nations, Geneva, accessed on 31/08/15, from http://www.unctad.org/Templates/Page.asp?intItemID=1717&lang=1
- 30. Vikas, SN. (2015), 41% of India E-commerce sales is from Mobile; Mobile wallet usage surging: Meeker's 2015 Internet Trends, accessed on 01/09/15 from http://tech.economictimes.indiatimes.com/news/internet/41-of-india-e-commerce-sales-is-from-mobile-mobile-wallet-usage-surging-meekers-2015-internet-trends/47452981
- 31. Vishwasrao, Sharmila & BBosshardt (2001), Foreign Ownership and Technology Adoption: Evidence From Indian Firms, Journal of Development Economics, Elsevier, Vol.65 (2), pages 367-387, August.
- 32. Warren, A. (2012), Five reasons why the UK leads the world for ecommerce, accessed on 02/09/15 from https://econsultancy.com/blog/11341-five-reasons-why-the-uk-leads-the-world-for-ecommerce/
- Yadav, N., Nagpal, A., (2014) E-Commerce in India: Growth, Key Challenges and Upcoming Trends, International Research, Journal of Management Science & Technology, ISSN 2348 – 9367 (Print), Volume 5, Issue 7
- 34. Yadalam, R. (2015), E-Commerce in US v/s Indian E-Commerce: Identifying the Missing Pieces, accessed on 21/10/15 from http://www.iamwire.com/2015/01/e-commerce-vs-indian-e-commerce-identifying-missing-pieces/108066
- 35. 5 Major Challenges Faced by eCommerce Businesses in India, a report by mavens, October 28, 2014, accessed on 09/09/15 from http://www.emavens.com/blog/ecommerce-2/major-challenges-faced-by-ecommerce-industry-in-india/