

## **E-COMMERCE TECHNOLOGY ADOPTION** **FRAMEWORK BY INDIAN MSME'S: A STUDY ON** **INDIAN PERSPECTIVE**

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### **Abstract**

E-commerce in India is driving the growth of small and medium enterprises (SMEs), which in turn is contributing to new job opportunities and GDP contribution. Electronic Commerce is one of the most promising channels for inter-organizational business processes. Presently, it is relatively a fictitious concept and heavily prefers on the internet and mobile phone revolution which is fundamentally changes the businesses to reach their customers. Around the world Electronic Commerce has changed the business. Evolution of E-commerce related in various relationships within the business processes which can be in the form of electronic advertising, electronic payment system, electronic marketing, electronic customer support service and electronic order and delivery. Today's challenging environment as it is competitive and resilient in order to survive it is essential as Indian Micro, Small and Medium Enterprises are playing a vital role in investing more and more in the internet business. The paper draws an attention to study the adoption of electronic commerce technology applications on the business processes in the Micro Small and Medium Enterprises and also to recognize the barriers to adopt of ecommerce technologies to the various businesses.

**Keywords:**E-commerce;MSME's;IAMAI;Business 2 Business;UNIDO.

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## 1. Introduction

The 'E-commerce' terminology is also called as 'e-mail' which means doing online business with the assistance of computer, e-mail, fax, and telephone lines. Earlier in 1972 IBM used the term 'e-commerce' and later with the invention of computers in 1973 the first successful transaction was carried out between USA and European Union. In 1990's the term e-commerce is the evidence as commercialization of internet, and growing popularity and further expanding the scope and size of e-commerce which increasing mobile penetration. Two decades ago the usage of E-commerce started with the invention of technology such as electronic fund transfers. Introduction of electronic data interchange extended it to producers, retail traders and other services as it spread in many different areas like stock market operations, travel reservations etc. E Commerce is the application of current and emerging information and communication technologies (ICTs) to conduct business. The existing technologies like landline telephone and fax, but the ICTs offering most scope for small businesses which are mobile phones, electronic mail and other Internet-based services.

In developing countries there are millions of Small Enterprises, including Micro-Enterprises, and more than 90% of all firms in district centres are Micro & Small Enterprises (MSEs), these contributes 80-90% of employment. They play significant role in wealth creation, making up perhaps around a quarter of gross domestic product and often contributing to exports as well. In a globalised world increasingly competitive MSEs need to compete more effectively in order to further boost domestic economic activities and contribute towards increasing export earnings. MSEs play a role to continue in increasing employment and incomes and thus contribute to poverty reduction on a sustainable basis. Ecommerce defines the sale or purchase of goods and services over computer networks by businesses, individuals, governments or other organisations. Ecommerce builds on traditional commerce by adding the flexibility and speed offered by electronic communications for redesign the traditional business methods which can facilitate improvement in operations leading to substantial cost savings as well as increased competitiveness and efficiency.

## 2. Objectives of the Study

- To identify factors influencing adoption of ecommerce in MSMEs.
- To identify the benefits of MSMEs by adopting the internet in their business operations.

- To analyze the existing problems in the electronic commerce set up of Micro, Small and Medium Enterprises.
- To examine the significance of MSMEs in using e-commerce.

### 3. Research Hypotheses

In order to evaluate the research questions, the following hypotheses were tested empirically:

- $H_{a1}$ : There is a significant relationship between the demographic variables like age, gender, and level of education of the owner or manager of the MSME and e-commerce adoption.
- $H_{a2}$ : There is a significant relationship between firm demographic variables like size, ICT capacity, and age of the firm and e-commerce adoption.
- $H_{a3}$ : There is a significant relationship between environmental variables like supplier pressure, sector of operation, market focus, competition intensity & customer pressure and e-commerce adoption.

### 4. Review Literature

Several research studies conducted on Indian MSMEs revealed that successful usage of e-commerce by the enterprises resulted in significant benefits & challenges. Lal (2004) states users of advanced e-business technology perform better than non-users in the export market. Indian MSME sector is still very low where as Indian MSMEs are no exception and penetration of ICT (Sharma and Bhagawat, 2006; Singh et al., 2010; CII, 2010). Adoption of ICT in Indian manufacturing sector has significantly lagged behind its global peers. India's spend on ICT is only US\$ 50 per capita while China spent double that amount during 2006 (NMCC & NASSCOM, 2010). Singh et al. (2010) examines the usage of information technology has significant relationship with performance of small firms in India. However, Indian MSMEs face several challenges to use ICT and there are problems both at the demand as well as supply side. MSMEs faced some of the barriers to use ICT are lack of financial capacity, small scale operation and lack of in-house IT manpower inhibit the adoption, lack of R&D, marketing (Kale

et al., 2010, NMCC & NASSCOMM, 2010; Kannabiran & Dharmalingam, 2012). Primarily MSMEs rely on small number of customers and operate in limited markets (Sharma and Bhagawat)

## **5. Impact of E commerce in India**

E-Commerce in India is one of the fast growing sectors of India's Digital Economy. Flip kart is the leader in retail e-commerce which is recently announced that it crossed \$ 1 Billion in sales early this year, this has many small e-commerce companies scrambling to gather a piece of the online e-tailing action. In developing countries internet technology can be instrumental in MSME growth, by the success of e-commerce companies like Alibaba.com in China and Flip kart in India as per study in Australia shows that small businesses that use the Internet extensively earn twice as much as those who use it less. Worldwide how much businesses use the internet is a part reflection of general and internet penetration rates have been increasing widely. Indian internet users increasing at a fast pace, driven by a population, rising income and education, and advances in technology, such as mobile-based access and the roll out of third-generation (3G) services. India has increased the number of users from 5.5 million in 2009 to about 150 million in 2013 and is projected to reach 348 million by 2017. Internet and Mobile Association of India conducted a survey in 22 cities nearly 21 million households owned personal computers or laptops in India as of March 2011 out of these about 51% had Internet connections, from which 41% had high-speed broadband connections (82% of households with Internet connections).

But there is lag in internet use by government and MSMEs in 2011-2012, the amount of India's GDP attributable to the Internet was modest 1.6%, amounting to US\$30 billion. The government contributed only 7% and the private sector 27%, compared to 33% by individual users and 33% by net exports of these US\$30 billion. The growth of e-commerce industry has been phenomenally high however, its growth is dependent on a number of factors and most important of them is internet connectivity. Forrester McKinsey report of 2013 identifies that India has 137 million internet users with penetration of 11% and total percentage of online buyers to internet users is 18%. Compared to India, China, Brazil, Sri Lanka and Pakistan have internet population of 538 (40%), 79 (40%), 3.2 (15%) and 29 (15%) millions respectively. Therefore, lower internet density continues to remain a challenge for e-commerce. As per the report of Digital Commerce,

IAMAI-IMRB (2013), e-commerce is growing at the CAGR of 34% and is expected to reach US\$ 13 billion by end of 2013. However, travel segment constitutes nearly 71% of the transactions of consumer e-commerce industry; thereby that e-tailing has not taken off in India in any meaningful way. Share of e-tail has grown at the rate of 10% in 2011 to 16% in 2012. Industry surveys suggest that e-commerce industry is expected to contribute around 4% to the GDP by 2020. In comparison with a NASSCOM report, by 2020, the IT-BPO industry is expected to account for 10% of India's GDP, while the share of telecommunication services in India's GDP is expected to increase to 15% by 2015 with enabling support, the e-commerce industry too can contribute much more to the GDP.

### 5.1 Modes of E-commerce

The Indian e-commerce industry comprises two key business models: B2B (90% of market share) and the remaining 10% comprise of B2C. India and China, unlike US are characterized by 'Marketplace Model'. The model provides platform to a large number of manufacturers/traders (especially MSMEs) to advertise their products (which translates to benefit the MSMEs in the form of increased turnover) as well as manages related functions and in turn the entity earns commission from sellers for goods and services. The B2B players do not carry inventory while in the other model-B2C, the merchant owns the goods. Indian Micro, Small and Medium Enterprises (MSMEs) have a relatively small investment, profits which can generate good business opportunities by automating their processes using electronic means. B2B and B2C Portals are the E-Commerce platforms which are playing very important role in enhancing the reach of MSMEs globally, e-Commerce transactions can be segmented into three broad categories or modes, based on participants which are as follows:

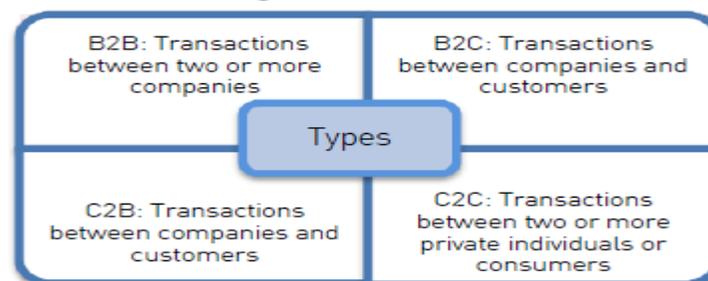


Figure: E-commerce Segment Information

**Source: IAMAI**

❖ **Business-to-Consumer (B2C):** B2C market in India generates the bulk of revenues across the consumer-facing modes of e-Commerce furthermore, though online travel has typically held a major share of the B2C market which is growing rapidly and is expected to significantly increase its share in online retail.

❖ **Consumer-to-Consumer (C2C):** India's C2C market is the transactions between two or more private individuals or consumers though currently small, is set to grow with the entry of several players and these entrants are attracting venture capital investment based on their online portals are also garnering significant traffic.

❖ **Business-to-Business (B2B):** Small businesses lack the requisite financial resources therefore, it find difficult to market their products and services to potential clients through traditional media such as newspapers, banners and television. Micro Small and Medium Enterprises are the most common users of B2B online which trade through online B2B portals increases the visibility of MSMEs in the marketplace and helps them to overcome barriers of time, communication and geography.

## 5.2 Multiple Stakeholders in the E-Commerce Sector

E-Commerce sector grow the supplier list with a number of businesses and individuals looking to join the e-Commerce bandwagon where the multiple stakeholders are engaged in this background, enablers like logistics players and call centers are widening and evolving their offerings to align them with the strategies of e-Commerce players as customer or buyer has become the **focal** point. The key stakeholders are engaging in innovation to provide a rich experience to their customers in gaining an edge & differentiation in power. To evolve ecosystem e-Commerce market analyzes some deciding factors for stakeholders while formulating their market strategies these stakeholders coordinate among each other to facilitate the three main flows in an e-Commerce transaction for the new opportunities which are as follows:

- **Product flow:** It is the flow of goods moving from suppliers to end consumers through e-Commerce and logistic players
- **Information flow:** Information flow of order status through the value chain where the information transmission of orders from customers and subsequent.

➤ **Monetary flow:** The flow monetary payments from consumers to e-Commerce players and or suppliers and vice-versa through financial intermediaries

### 5.3 Problems of Adopting E-Commerce by MSME

The adoption of e-commerce by MSMEs needs to be addressed as though there exist a lot of benefits to e-commerce with some areas of concern which are as follows:

- The development of e-commerce involves many types of problems such as capital security, information security, commodity security and business secrets. Security is the lack of concern that has become the biggest obstacle in order to popularize e-commerce it is very important that the security issues are addressed properly. Open internet safe transmission of data is also most important factor which plays a major role in popularizing electronic commerce.
- E-commerce only stays on the surface of website construction considering as surfing the internet or simply establishing a website, without having the related management foundation. Thus the e-commerce conducted by many Micro, Small and Medium-sized Enterprises which tends to lack in long term planning.
- E-commerce involves business transformation and different enterprises have the different ways to develop e-commerce in order to reap the benefits of internet the implementation of e-commerce in many micro, small and medium-sized enterprises needs to be gradually realized, planned for a long time which can be done by making use of the internet to browse, collect and issue information, to establishing enterprise's own website and information platform conducting online purchase, and setting up joint purchase platform of the trade and perfecting the management system of supply chain.
- Micro, Small and Medium sized Enterprises need both technology and talents, because of the lack of professional personnel and of innovation in the pattern of e-commerce, the micro, small and medium-sized enterprises are short of network-running experience, and superiority of e-commerce which could not be given full consequently many such enterprises engaged in e-commerce are not competent enough. The lack of professional personnel is the most important factor hindering the application of e-commerce in micro, small and medium-sized enterprises.

## 6. Research Method

Information is collected from various secondary sources through exploratory research to explore potentiality of E-Commerce market and to study the adoption of E-Commerce sector on Indian MSME sector. To justify the above mentioned objectives further, Department of Telecommunications, Internet Mobile Association of India, etc. have also been accessed for the study

### 6.1 Research Design

Data gathered through sample survey about how Indian MSMEs perceive & use the benefits of the internet which keeps them from using it more. Across the country MSMEs select the clusters from industrial and geographical where it represents the varying levels of development & its impact of internet usage in manufacturing, services & agriculture sectors & also subsectors that contribute to foreign trade and are expected to use the internet operations. On the basis of input from the MSMEs ministry & UNIDO 19 geographic clusters were selected as the project schedule and budget were 11 states and 14 industrial subsectors in the geographical clusters.

## 7. Result and Data Analysis

Information is collected from various secondary sources through exploratory research to explore potentiality of E-Commerce market and to study the adoption of E-Commerce sector on Indian MSME sector. To justify the above mentioned objectives further, Department of Telecommunications, Internet Mobile Association of India, etc. have also been accessed for the study.

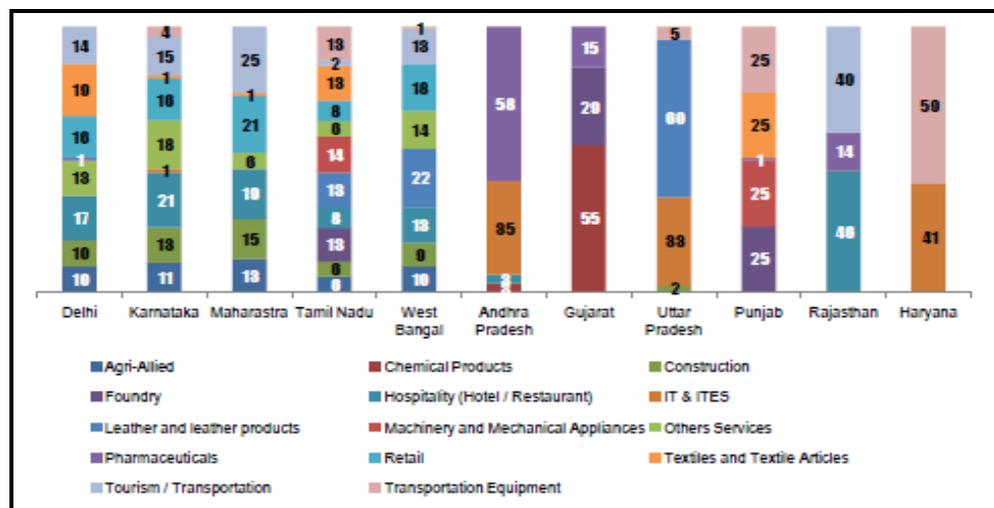


Figure 1. Classification of surveyed MSMEs by geography and subsector  
*Source: Ministry of MSMEs*

As per the Fourth Annual Census of MSMEs, about 7.67 Lakh (767 hundred thousand) MSMEs were registered in India in 2007. A sample size of 751 MSMEs is taken for the study by using a 90% confidence interval and a margin of error of 3%, however, another 200 surveys to account for non-response and the final sample was 951 MSMEs. The survey questionnaire consists of 83 questions on demographic and financial variables, internet connectivity, and use of internet applications. Among the surveyed MSMEs, about 85% were small enterprises and 10% were medium enterprises. 52% were in the manufacturing sector, 45 % were in the service sector, and the remaining 3% were in the agriculture sector summarizes the demographic, business, and internet use characteristics of the surveyed sample by sector is shows in below table

Table 2. Demographic, Business, and Internet user characteristics of the surveyed sample sector wise.

<b>Parameter</b>	<b>Agriculture</b>	<b>Manufacturing</b>	<b>Service</b>	<b>All Sectors</b>
Number of enterprises	60	110	340	550
<b>DEMOGRAPHIC</b>				
Average age of key personnel (years)	20	30	35	40
Average educational qualification of key personnel	Diploma/certificate course	Graduate/Bachelor's	Graduate/Bachelor's	Graduate/Bachelor's
Enterprise's average ownership structure	Partnership	Partnership	Partnership	Partnership
<b>BUSINESS</b>				
Percent engaging in	10	25	11	18

foreign trade				
Average geographic reach	State Level	State Level	State Level	State Level
<b>INTERNET</b>				
Percent using computers and laptops	95	90	87	85
Percent using the Internet	65	90	87	95
Percent with a website	30	56	70	50
Percent engaging in e-commerce	20	29	37	47
Average Internet use in Gigabytes(GB)	22	20	26	23
Percentage of employees aware of the Internet	41	43	63	52
Percent using the Internet to find competitors' prices	41	48	77	65
Percent using social media	15	45	42	40
Percent using search engine optimization	20	17	35	25
Percent using the Internet to advertise	30	38	55	51

*Source: Sensis Business Index. (2015)*

The above table summarizes the sector wise surveyed sample of demographic, business, and internet use characteristics of the sector among surveyed SMEs, about 85% were small enterprises and 10% were medium enterprises. 52% were in the manufacturing sector, 45% were in the service sector, and the remaining 3% were in the agriculture sector.

**Use of Personal Computers:** As per survey 95 % of usage of personal computers by SMEs which rate ranged from 74 % in the foundry subsector to 100 % in the information technology & enabled services (IT&ITES), other services, tourism or transportation and transportation equipment subsectors.

**Use of the Internet:** About 84% of MSMEs used to get information on domestic market trends, 71% to find clients, and 55% to research competitors' prices. Only 27% use it for e-commerce and a mere 42% for advertising. There is drastic changes taken place in all other sectors where SMEs uses social media with 39 % of internet using surveyed, a rate higher than found in a recent study in Australia (27%) as expected, internet use among SMEs in the IT & ITES subsector was 100% and also there was highest users in tourism or transportation (98 %), followed by chemical products (96 %), pharmaceuticals (95 %), retail (70 %), agri-allied (63 %), and foundry (49 %).

Table 3. Statement Showing No.of Internet Users Region Wise

Year/ Region	June 2012	June 2013	June 2015	Oct 2015	Dec 2015	June 2016
Rural	38	60	120	129	134	153
Urban	99	130	220	246	268	309
<b>TOTAL</b>	<b>137</b>	<b>190</b>	<b>340</b>	<b>375</b>	<b>402</b>	<b>462</b>

Source: *internetworldstats.com*

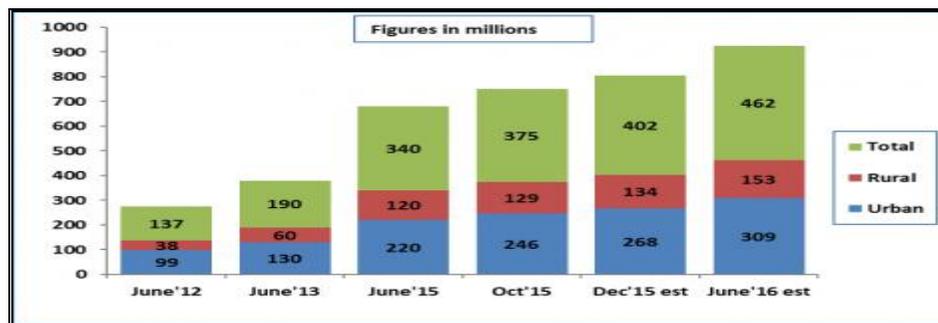


Figure 3. Internet Users Region Wise

The above table & figure indicates that Indians took more than a decade to move from 10 million to 100 million and 3 years from 100 to 200 million, but it took only a year to move from 300 to 400 million users. In October, India had 375 million users, which is considered as the third largest internet user base in the world. It estimates that India will overtake the US as the second largest Internet user's base in the world.

In the past few decades there is the fast development of telecommunications technology is changing many aspects of our lives – how we search for information, how we travel and not at least how we buy products or services. Although classic shop-based retail is still preferred, e-commerce or electronic commerce, namely the buying and selling of products and services exclusively through electronic channels, is gaining ground. The most well-known form of e-commerce or electronic commerce is online shopping, also known as business to consumer e-commerce (B2C), where private customers can order various products which they then receive by courier or postal mail. Another category of e-commerce focuses on transactions between companies, such as manufacturers and a wholesalers or wholesalers and retailers and is called business to business e-commerce (B2B). The third category of e-commerce involves transactions from consumer to consumer (C2C), as in the example of eBay or other similar websites. E-commerce transactions are globally stated to be around 90% in the nature of B2B; leaving meager 10% as B2C e-commerce where as India has no different in most of such transactions are in the nature of B2B moreover e-commerce industry is characterized by Market place model in India which allows large number of manufacturers or traders especially MSMEs to advertise their products on the Market Place and benefit from increased turnover. The growing e-commerce industry can have a positive spillover effect on associated industries like logistics, online advertising, media and IT/ITES. Currently e-commerce accounts for 15-20% of the total revenues for some of the big logistics companies. The revenue for logistics industry from inventory based consumer e-commerce alone may grow by 70 times to USD 2.6 Billion (INR 14,300 crores) by 2020. The inventory based consumer e-commerce model alone provides direct employment to approximately 40,000 people and is estimated to create 1 million direct and another 0.5 million indirect jobs by 2020. Low entry barriers have attracted many young and enterprising individuals to try their hand at entrepreneurship. A significant 63% of e-commerce

ventures have been started by first time entrepreneurs. Indian e-commerce industry is in nascent stage and is nowhere in the league of big global players. Flipkart, Snapdeal, Fashionandyou, Myntra, InKart, Dealsandyou, Homeshop18 etc are major domestic e-commerce companies.

Table 4. Statement Showing Internet Users in Country Wise

Country	China	US	India	Japan	Russia	Germany	France	UK	Pakistan	Hongkong	Sri Lanka
Million	721,434,547	286,942,362	462,124,989	115,111,595	102,258,256	71,016,605	55,860,330	60,273,385	34,342,400	5,442,101	6,087,164
%	52.2	88.5	34.8	91.1	71.3	88	86.4	92.6	17.8	74.1	29.3

Source: *internetworldstats.com*

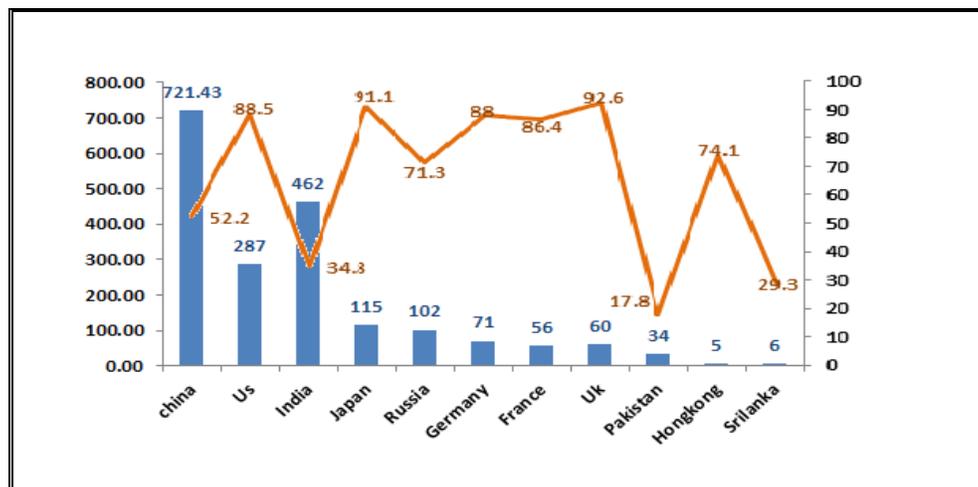


Figure 4. Internet Users in Country Wise

Growth of e-commerce in India has many factors to support in the fledgling industry which is faced with significant hurdles with respect to infrastructure, governance and regulation. Low internet penetration of 11% impedes the growth of e-commerce by limiting the internet access to a broader segment of the population. Poor last mile connectivity due to missing links in supply chain infrastructure is limiting the access to far flung areas where a significant portion of the

population resides. High dropout rates of 25-30% on payment gateways, consumer trust deficit and slow adoption of online payments are compelling e-commerce companies to rely on costlier payment methods such as Cash on Delivery (COD). In India it is over 70% of all consumer e-commerce transactions are travel related, comprising mainly online booking of airline tickets, railway tickets and hotel bookings. Makemytrip.com, Yatra.com are the biggest players in the travel category and the IRCTC website for railway bookings. Non-travel related online commerce comprises 25-30 % of the B2C e-Commerce market. The unfettered growth of online travel category has been possible because the regulatory and infrastructure issues do not impede its growth. Also, it does not face the infrastructure challenges since the goods need not be transferred physically.

### 8. SMEs WITH WEBSITES:

As per the surveyed information the 49 % of MSMEs using internet had websites that is IT & ITES and hospitality had the highest numbers comparing with the chemical products and foundry subsectors as it had the lowest. In India, 93 % of SMEs with websites used the Internet for email, compared with only 50% in China even though the SMEs surveyed in both studies had websites at similar rates. According to the report by *Internet & Mobile Association of India* (IAMAI) the low cost of broadband has helped increase in internet usage with high demand for “.in” domain registrations are also factors for the increase in online users were reached to 205 Million in 2103. In the year 2013 the number of internet users in urban India is 137 Million and in Rural India, there are 68 Million internet users. The Total percentage of online buyers to internet users is 18%. The penetration of e-commerce is low compared to markets like the US and the UK but is growing at a much faster rate with a large number of new entrants.

Table 5. Statement Showing Users by modes to access Internet (%) through mobile phones

Year/Use rs	2007	2008	2009	2010	2011	2012	2013	2014	2015
Work	34	38	40	29	32	14	10	8	6
Home	30	26	23	37	32	24	19	16	14

Cybercafe	36	36	37	34	27	19	13	9	7
Mobile	0	0	0	0	9	43	58	67	73

Source: World Bank, IAMAI, Aranca Research

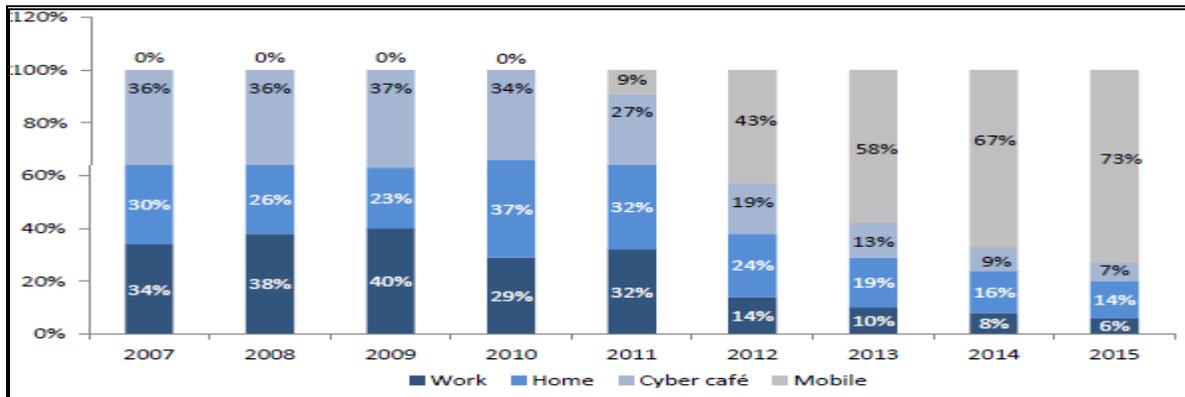


Figure 5. Users by modes to access Internet (%) through mobile phones

The above table indicates performance of users by different modes to access the internet as the results shows there is drastic changes from the year 2007-2015

Table 6. Statement Showing Usage of Wired Broad band & Mobile Internet

	Hardware (PC/Mobile Phone)	Router/Modem	Installation	Monthly Bill	Maintenance (Annual)
<b>Wired Broad band</b>	15000	1500	500	700	2000
<b>Mobile Internet</b>	6000	0	0	200	500

Source: internetworldstats.com

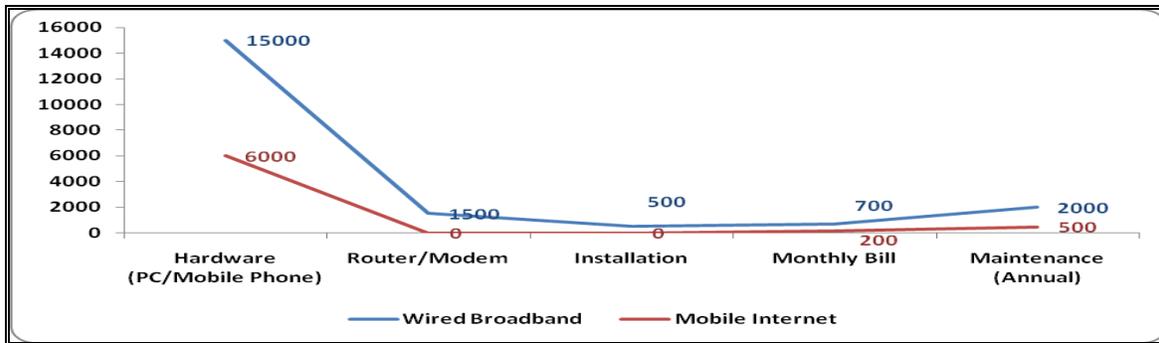


Figure 6. Usage of Wired Broad band & Mobile Internet

Total Internet Set up Cost, Monthly Charges, and Average Use:

- **Mobile Phones as Internet Connection:**

Wired connections are the most common source of the Internet used by all sectors; while mobile phones are primarily used by the textile products subsector.

- **Connection Costs:**

Data cards are the cheapest to use, but allow for only limited use where as Wi-Fi costs the most to set up and on a monthly basis, followed by wired connections.

Table 7. Average Internet Set up Cost, Monthly Charges, and Average Use

Type of Internet Connection	Set up cost (INR)		Monthly Charges (INR)		Use (GB)	
	Average	Median	Average	Median	Average	Median
Wired	3,720	1500	2,295	1095	96.5	5.0
Data Card	2,875	1,699	1,808	885	7.5	3.0
WiFi	5,700	2,575	3,225	160	24.5	6.0
Others	285	189	1851	958	2.0	2.0
Overall	3145	1491	2295	775	32.63	4.87

Source: *internetworldstats.com*

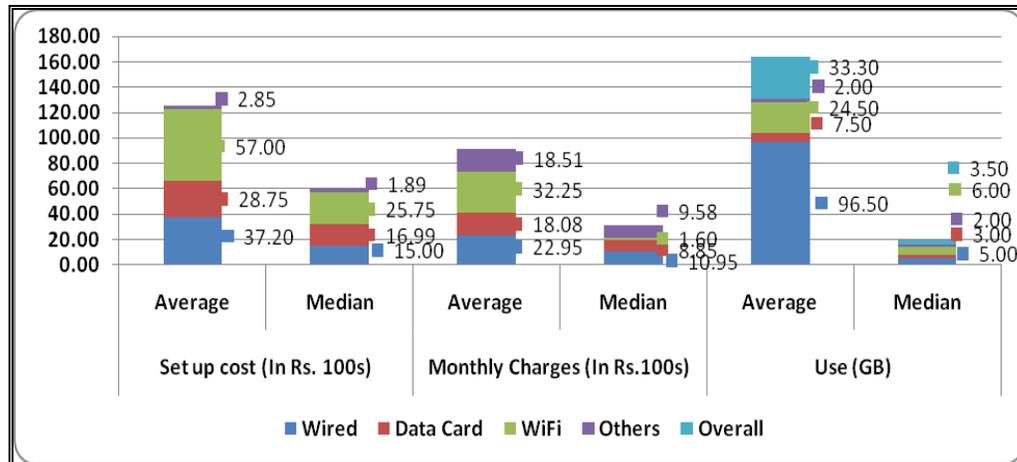


Figure 7. Usage of Average Internet Set up Cost, Monthly Charges

The above table indicates the types of internet connection its setup cost, monthly charges and average use. The overall set up cost is higher than others as it is increased drastically.

### 8.1 Impact of Internet on Revenue, Profitability, Innovation, Costs, Coverage, Productivity, and Employment

The Internet's has positive impact on sales and geographic reach is also well recognized in the hospitality, textiles and textile articles, and tourism or transportation subsectors which summarizes the respondents' perception of the impact of their Internet use. The benefits expected for the IT & ITES subsector, MSMEs in the chemical products subsector attribute an exceptional increase in customer acquisition, revenue, profit, and geographic reach to the Internet, which facilitates linkage with the upstream and downstream markets. The perceived benefits of using the internet are significant as 69 % of respondents reported an increase in customers due to internet use, 65 % an increase in profits, 64 % an increase in sales, 63 % in geographic reach, and 44 % in employment.

Table 8. Statement Showing Surveyed Respondents

Respondents	Increased	No Change	Decreased
Customer acquisition	69	28	3

Profit	65	31	4
Sales	64	33	3
Geographic reach	63	35	1
Production	56	40	4
Cost of operation	51	40	10
Development	49	49	2
Hours spent on research	47	52	2
Employment	44	54	2
Transaction time	44	54	2
Awareness	42	57	1

Source: *internetworldstats.com*

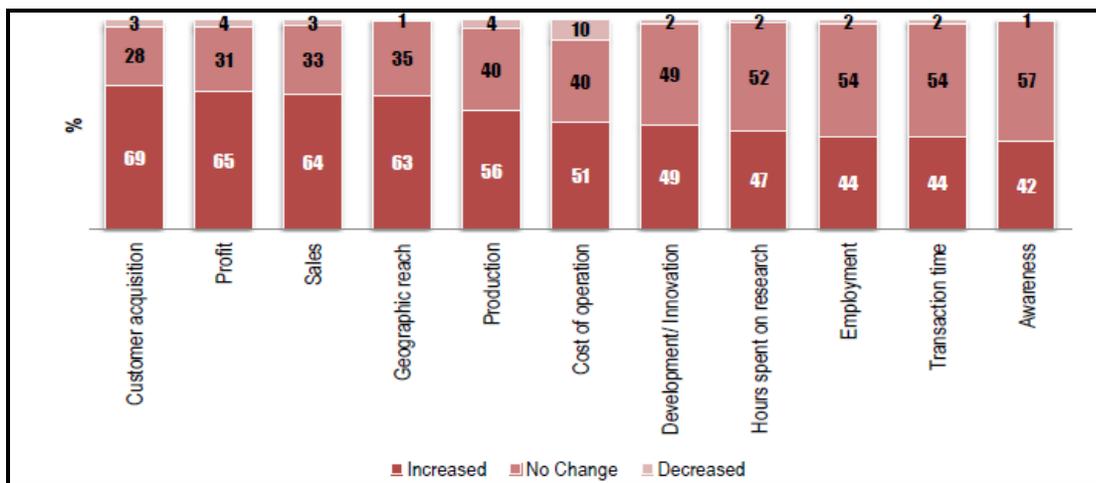


Figure 8. Surveyed Respondents' Perceived Impact of Internet on Revenue, Profitability, Innovation, Costs, Coverage, Productivity, and Employment

MSMEs using the internet are far better in revenue, profit, and employment than those that do not confirmed by statistical tests and regression analysis, which controls for other factors that could be influencing performance of internet users. As per the survey MSMEs who use the internet are those in the service sector fared better than the others on all performance indicators and in manufacturing and services benefited from e-commerce and internet advertising,

suggesting that these applications have inherent appeal to India's tech savvy youth who prefer fast and easy purchasing methods and showing how e-commerce shrinks the world and enables transactions that otherwise would not exist.

The earlier studies conform that by offering platforms for MSMEs to transact online, internet-based firms like Google, E-bay, Amazon, Alibaba.com and Face book help SMEs grow and expand internationally. Some subsectors are more aggressive in using the internet and its applications than others. MSMEs in the leather and the subsector of leather products are increasingly involved in foreign trade and use the internet with maximum impact to advertise their products. About 32 % of leather product MSMEs surveyed is engaged in foreign trade, mostly exports. IT & ITES subsector also had a huge positive impact on performance of using the internet. Tourism or transportation services, hospitality, chemical products, textile and textile articles, construction services, retail and also benefited. Subsectors like textiles and garments in particular credit the internet with expanding their market reach and demonstrate the promise of intensifying use of Internet in business operations

## **9. Recommendations**

Globally, India has 150 million Internet users, behind only China and the United States but its Internet penetration rate is a mere 10 % one of the lowest. The impact of all businesses that use the internet which leads to increase sales, profits, number of customers, productivity, and small businesses stand to gain the most are as follows:

- Lower Costs of IT Equipment and Internet Connections
- Improve Internet Infrastructure–Internet Speed and Power Reliability
- Create a Secure Environment for E-Commerce
- Raise Awareness of the Internet and Develop Related Skills
- Support a Growth-enabling Environment

## **10. Conclusion**

India's E-commerce industry contributes positively to the overall economic development going forward. Globally India being the second most populous country has huge online market and tremendous potential. Internet penetration is expected to increase as once Indian Government

will roll out its National Optical Fibre Network Plan where foreign players are looking to tap the opportunity in the sector. The growth path of E-Commerce will continue combined with support from the Government of India as India's internet becomes more stable more powerful with the fast growth of E-Commerce, which therefore play an significant part in the 21st Generation for the new opportunity that will surely open a growth in both Micro, Small and Medium Enterprises (MSMEs) and also open a door for domestic and international business which allow increasing their IPR, privacy, security etc. In this paper the adoption of e-commerce and framework of barriers of has been reviewed which includes lack of trust and knowledge, language and culture etc. which makes a gap between adoption of e-commerce in different places like India.

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