

Determinants of E- Commerce in Indian MSME Sector

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Abstract: *The use of electronic commerce (e-commerce) in business transactions, now a priority for many firms, is attracting increasing attention. As the world economy integrates and reduces its trade barriers, some of the greatest opportunities for small businesses will derive from their ability to participate in regional and international markets. Adopting information and communications technology (ICT) is considered a means of enabling small businesses to compete globally through improved efficiency and closer customer and supplier relationships. Information and communications technology may also help small and medium sized enterprises (SMEs) enhance their competitiveness. Electronic commerce (e-commerce) is widening the concept of business from a simple transactional approach to a broader and more complex concept of inter-firm co-operation. Amidst market globalization, growing interpenetration of national economies and the increased interdependence of national economies, e-commerce adoption remains a vital yet complex and elusive phenomenon, with very little known about its determinants. This study identifies the major determining factors in Indian small and medium sized enterprises' (SMEs) e-commerce adoption, offers practical implications, and indicates the actions required. This research integrates technological, organizational, and environmental determinisms with social constructivism to build a practical framework for understanding e-commerce adoption among SMEs in India . Structural equation modeling was employed for data analysis.*

Keywords: Commerce Adoption, Government Support, Enabling Conditions, Managerial Support

I. INTRODUCTION

E-commerce is changing the shape of competition, streamlining interactions and payments from consumers to companies and from companies to suppliers, while making marketing more flexible and accessible, lengthening business hours across the world. E-commerce offers many benefits, particularly productivity gains, transaction cost reductions, efficient information sharing between organizations within and across industries, and automatic product identification. E-commerce also plays a significant role in bridging the digital gap between developed and developing economies through improved access to information, knowledge, and expertise. E-commerce also allows global businesses to extend their supply chain and engage in international trade more efficiently and effectively regardless of location. Consequently, e-commerce can enhance the competitiveness of developing countries and reduce poverty (Qureshi and Davis, 2007).

Nevertheless, the competitive business environment, and the need to survive in it, make SMEs' adoption of e-commerce inevitable: SMEs must adopt innovative and informed e-marketing strategies to remain distinct, profitable, and successful in domestic and international markets. The Internet has become so important that its usage should form an integral part of SME operations in developing countries. He further maintains that the Internet has become a pervasive aspect of ICT, which is radically changing the traditional forms of trade and providing windows of opportunities that enterprises, especially those from developing countries, can exploit. This is further affirmed by the Nielsen Company (2008), which claims that more than 85% of the world's online population has used the Internet to make a purchase.

II. CONTRIBUTION OF MSME SECTOR TO INDIAN ECONOMY

MSMEs, credited with generating the highest rate of employment after agriculture, account for a major share in industrial production and exports. This sector accounts for around 45% of the total manufacturing output; 40% of India's total exports and contributes around 8% in India's Gross Domestic Product (GDP). It employs about 59 million persons in over 26 million units across the country. There are over 6000 products ranging from traditional to high-tech items, which are being manufactured by the MSMEs in India.

The total number of MSMEs operating in India significantly increased 207% per cent between 2000-01 and 2009-10 and the sector registered a sterling 21.52% compounded annual growth in terms of production. The employment generating potential of the sector has also grown at an annual compounded rate of 11.74% in the last decade. Nearly 50% of the MSMEs are owned by disadvantaged groups of society.

Manufacturing sector contributes around 15% in India's Gross Domestic Product (GDP). In that MSME sector contributes 8% in India's Gross Domestic Product (GDP) & 45% of the total manufacturing output of India. National Manufacturing Policy envisages increasing the share of Manufacturing in GDP to 25 % over the next decade and generating additional 100 million jobs in manufacturing sector through an annual average growth rate of 12-14 % in manufacturing sector. MSME sector being the major base of manufacturing sector in India. This would call for quantum jump in plan allocation for the sector during the 12th Plan to address major bottlenecks facing the sector.

This important sector plays a vital role within the development of economy's infrastructure by providing employment generation, innovation and wealth creation. MSME sector contributes not only to higher rate of economic growth but also in building an inclusive and sustainable society in innumerable ways through creation of non-farm livelihood at low cost, balanced regional development, gender & social balance, environmentally sustainable development and to top it all, recession proofing of economic growth, which the sector has proven time and again. SMEs are significantly contributing to industrial, economic, technological and regional developments in all economies, developed and developing.

III. E-COMMERCE IN INDIA

Electronic commerce (EC) or e-commerce implies doing business activities for products and services & other tasks electronically rather than by physical exchanges or direct physical contact. It is an Internet, Information & Technology-based process. A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals. E-commerce not only permits but facilitates an increase in productivity enabling the creation of new relationships with customers, distributors, suppliers and other strategic partners.

Schmid [9] details the benefit of Electronic Commerce to be lower cost of trading, faster and better-informed business decisions, and less importance of geography. Other authors mentioned various advantages relevant to Small and Medium-sized Enterprises such as the "leveling of the playing fields" with the big business location independence time independence the ease of communication and ability to achieve competitive advantages for the businesses. E-commerce permits organizations to access potential customers and suppliers via the web. A number of the most important advantages of e-commerce offers are: expanded marketplaces, potential value reductions, productivity enhancements, customization of product and services, twenty-four-hour trading and knowledge exchange and management.

IV. REVIEW OF LITERATURE

Turban et al. (2008) defined e-commerce as the process of selling, buying, transferring, or exchanging products, services, and/or information through the Internet. They distinguished between Internet and non-Internet e-commerce, whereby the latter involves buying and paying for services or products using such methods as the smart card through vending machines or transactions via networks such as local area networks (LANs).

Huy and Filiatrault (2006) claimed that e-commerce is any economic or business activity that uses ICT applications to enable the buying and selling of products and services, facilitating business transactions between and among businesses, individuals, governments, and other organizations.

Molla and Licker (2005) argued that businesses should take advantage of e-commerce's opportunities and expand their market reach, gain from economies of scale, become more profitable, and contribute to economic development. E-commerce has changed the face of retail, services, and global business strategies. It will continue to influence how companies sell and market their products, as well as how people make their purchases.

Porter (2001) argued that e-commerce allows economic actors to significantly reduce their transaction costs, encouraging the use of markets to organize economic activities, improve company performance, and promote consumption. Effectively utilized, then, e-commerce can provide opportunities in international trade and facilitate growth and economic development.

Mitra Abhijit (2013) suggests E-Commerce has unleashed yet another revolution, which is changing the way businesses buy and sell products and services. New methodologies have evolved. The role of geographic distances in forming business relationships is reduced. E-Commerce is the future of shopping. With the deployment of 3G and 4G wireless communication technologies, the internet economy will continue to grow robustly. In the next 3 to 5 years, India will have 30 to 70 million internet users which will equal, if not surpass, many of the developed countries. Internet economy will then become more meaningful in India. With the rapid expansion of internet, E-commerce is set to play a very important role in the 21st century, the new opportunities that will be thrown open, will be accessible to both large corporations and small companies.

Chanana Nisha and Goele Sangeeta (2012) propose that the future of E-Commerce is difficult to predict. There are various segments that would grow in the future like: Travel and Tourism, electronic appliances, hardware products and apparel. There are also some essential factors which will significantly contribute to the boom of the E-Commerce industry in India i.e., replacement guarantee, M-Commerce services, location-based services, multiple payment option, right content, shipment option, legal requirement of generating invoices for online transactions, quick Service, T & C should be clear & realistic, the product quality should be same as shown on the portal, dedicated 24/7 customer care center should be there.

Awais Muhammad and Samin Tanzila (2012) indicate that use of internet has made the world a global village. The use of Internet has reduced the distances and brought the people together. A nation's back bone is commerce and it will be strengthened if backed by electronic tools in which e-commerce plays a vital role. The important feature in e-commerce is privacy which not only increases competitive advantage but confidence level also. E-commerce brings sellers and potential buyers at the distance of one click and it saves time as it is cost effective, as E-commerce is becoming key to success.

Dutta and Dutta, (2009) found tangibles have the highest impact on overall customer satisfaction. The largest discrepancy between the customer expectations and perceptions is in terms of empathy which includes Bank locations and ATM machines in convenient places and telebanking and internet banking facility. The study regards this a major source of concern for Indian banking industry as a huge service quality gap exists for all the banks in this category.

Blasio (2008), in his study does not find the support for the argument that the Internet reduces the role of distance. Internet usage is much more frequent among urban consumers than among their non-urban counterparts. The use of e-commerce is basically unaffected by the size of the city where the household lives. Geographically remote consumers are discouraged from purchasing goods by the fact that they cannot inspect them beforehand. Leisure activities and cultural items (i.e., books, CDs, and tickets for museums and theaters) are the only goods and services for which e-commerce is used more in isolated areas. Finally, e-banking bears no relationship to city size. In choosing a bank, non-urban customers give more importance to personal acquaintance than do urban clients, partly because bank account holders in remote areas are more likely to have taken out a loan from their bank.

Ozok et al (2007) identified ten items contributing to overall consistency in e-commerce customer relationship management. These items are consistency of transaction steps, consistency of Web site design, consistency of navigation, consistency of promotions, consistency of in-stock indications, consistency of product variety, consistency of fraud protection, consistency of product guarantees, consistency of overall site fairness, and consistency of return policies.

This list of consistency items includes three usability items. It can be concluded that sites with good usability have a better chance of having successful CRM implementation in their business. Consistency of promotions, in-stock indications, product variety, fraud protection, guarantees, fairness, and return policies indicate mainly that customers in

fact demand a high level of security-related information as well as trustworthiness and high ethics on the shopping site to become regular customers of vendors. Customers demand equal and consistent treatment concerning products and product related services. The findings indicate that the level of security and guarantees presented to customers has a significant positive effect on customer retention and customer acquisition.

Singh and Lalwani (2007) in their work on internet banking suggest that internet banking has facilitated the banking relationships with the customers. It is now widely accepted in the country because of the fact that it is the cheapest source of providing banking services. As more and more banks will succeed in online banking, a day will come when it will reach a commonplace as ATM's. It has not only increased the banking transactions but also has reduced the time and cost factor. It has brought revolution in the banking industry

V. OBJECTIVES OF THE STUDY

- To study the determinants of e-commerce in Indian MSME sector
- To study the purpose of determinants of e-commerce in Indian MSME sector
- To compare the usage of determinants of e-commerce in Indian MSME sector
- To provide an up-to-date and comprehensive review of determinants of e-commerce in Indian MSME sector

VI. RESEARCH METHODOLOGY

The Research has been based on conceptual research work. A depth study was carried out. This paper discusses the legal aspects related to study determinants of e-commerce in Indian MSME sector to understand the depth of determinants of e-commerce in Indian MSME sector, the values that e-commerce holds and to understand the importance of determinants of e-commerce in Indian MSME sector.

Secondary data has been used and studies from the previous researchers to identify various aspects related to the topic. Literature review and introduction has been preparing with the help of research paper publications, articles, and other internet sources.

VII. FINDINGS AND DISCUSSION

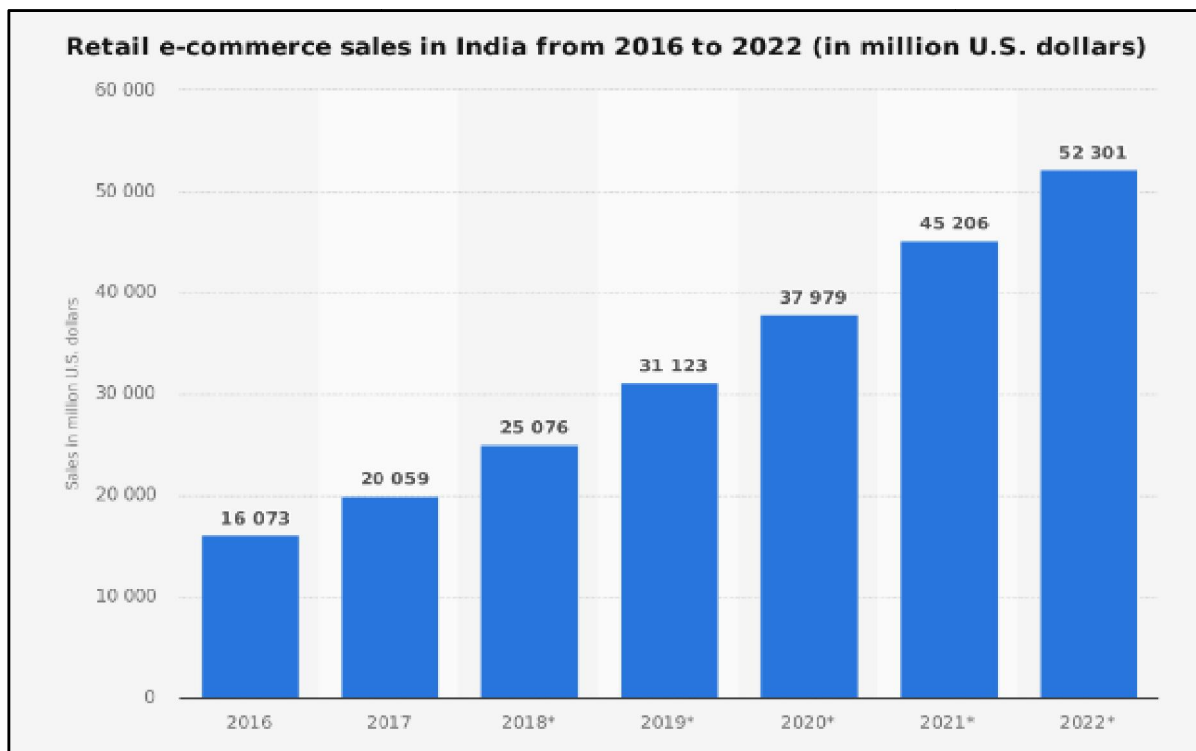


FIGURE: RETAIL E COMMERCE SALES IN INDIA

Source: <https://icoweb solutions.com/the-future-of-ecommerce-websites-in-india/>

The above graph shows the growth of e commerce in India over the period of 2016 to 2022.that has shown immense growth over these periods.

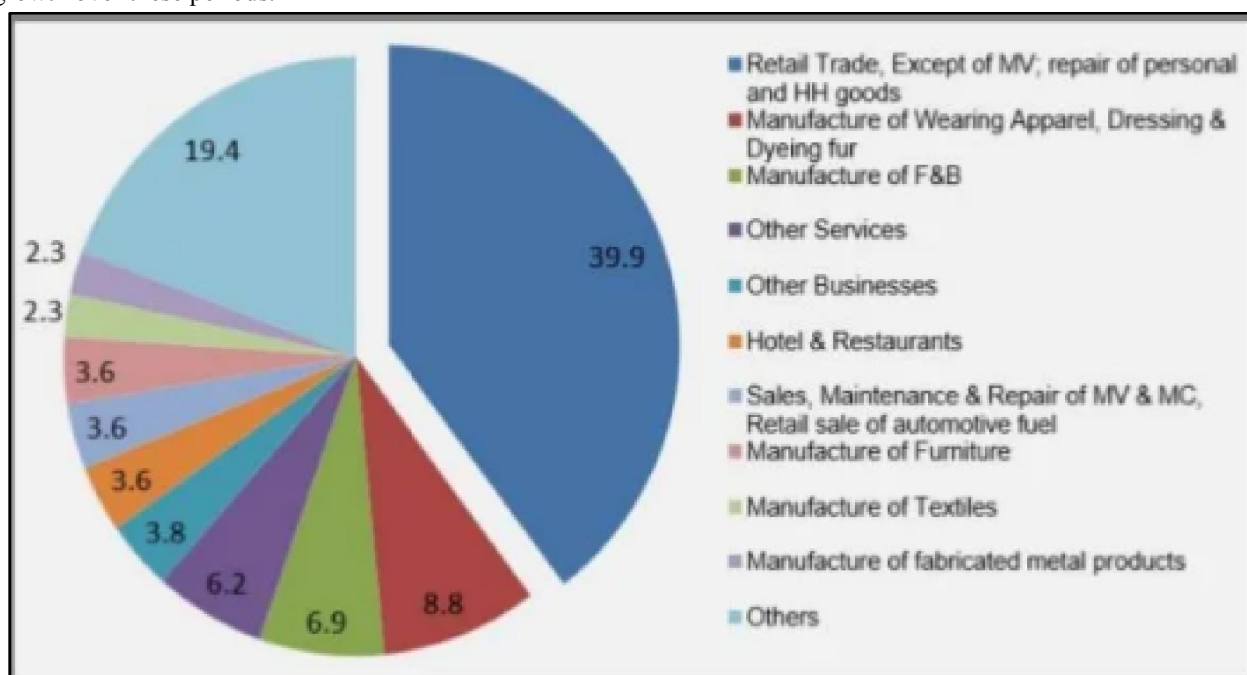


Figure: KEY INDUSTRY SHARE FOR MSME IN PERCENTAGE.

Source:<https://www.slideshare.net/ResurgentIndia/msme-sector-in-india-the-engine-of-growth-part-3> The above graph shows that key industry share over India

VIII. CONCLUSION

Technology Adoption is defined as the first use or acceptance of the technology or product that appears. Studies on technology adoption intended to predict, understand, and explain variables influencing adoption behavior at individual as well as organizational levels to accept and use technological innovations. Adoption of Information technology (IT) enables SMEs to take competitive advantage in global market, IT can give SMEs a competitive advantage in new economic era, especially in product marketing. The use of IT as a media for marketing and promotion will not be separated from internet. Internet technology for sustainable trade can be done using e-commerce. When compared with e-commerce sales in countries in ASEAN, Indonesia is the largest. However, from use of e-commerce for sales, MSMEs have not been able to be implemented properly, even increase in use of e-commerce for business processes is mostly driven by large companies.

As discussed in the previous chapter, it can be concluded that the TOE framework can be used to determine factors that influence e-commerce adoption by SMEs. From previous studies it is known literature on technology variables can be measured as indicators of relative advantage, perceived complexity and compatibility technology. Organizational variables can be measured by indicators of top management support, information technology knowledge and organizational size. Whereas in environmental variables can be measured by indicators of competitive pressure and trading partner's pressure. In this study, it can also be seen that although many studies that reveal technology, organization, and environment variables have a significant influence on e-commerce adoption, there are also several other studies, some of which state that technology, organization, and environment variables have no significant influence on e-commerce adoption. The results of previous studies have different findings and are mutually opposite between one study and another. It is hoped that from the different findings, additional research can be carried out to determine the factors that influence technology, organizational and environmental variables on e-commerce adoption for SMEs.

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