

E-Commerce and SMEs: A Case Study of Mumbai City

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ABSTRACT:

E-commerce has experienced a major rise in Mumbai city. The rise in the e-commerce has been stimulated by a number of factors such as increase in literacy rate, awareness, increase in the disposable income of the rising middle class, rise in the number of mobile and internet users (3G/4G) and several other government initiatives etc. The main aim of this research is to study the level of acceptance and adoption of e-commerce in business practices among SME segment in Mumbai. Also we identify factors that may influence acceptance of e-commerce and understand the benefits of application of e-commerce by SMEs in Mumbai. The analysis of our study concludes that Indian SMEs in Mumbai need a more conducive environment, a unified tax structure, high skilled workforce, and rich e-commerce infrastructure to take fuller advantage of e-commerce.

Keywords: E-commerce, adoption, Acceptance, SMEs, Internet, business, factors

I. Introduction

Today e-commerce is growing rapidly on a global level affecting all business organizations and subsequently changing the way organizations conduct their business. Electronic commerce (E-Commerce) refers to buying or selling of product and services online using internet or phone. It also refers to any business transaction made online using a website. E-commerce (Online business) is suggested to mean the production, distribution of goods, advertising, sale or goods delivery and services by electronic methods. Mumbai is quickly embracing new and trend setting innovation and is currently apace with the present situation of electronic information trades and has taken to the way of "web based business". Several definitions has been given by worldwide association and bodies. E-commerce is the method of conducting business activities online using internet or phone. The growth of e-commerce has prompted a raise in marketable transactions for multiple times in comparison with pre-commerce (trade) period in Mumbai city. E-commerce depends on advanced, smart technology and electronic communications; for example, internet, extranets, e-mail, databases and smart mobile phones that are gaining importance in the Mumbai retail market. This study will further look into various significant features about E-commerce acceptance and adoption by SMEs in Mumbai city. The consecutive sections elaborate the layout of the paper in details. Section II will discuss the acceptance and adoption levels of e-commerce. Section III will present factors that may influence acceptance of e-commerce. Section IV will discuss about the benefits of use of e-commerce by SMEs in Mumbai city and Section V will be the Conclusion section.

i. Objectives of Study

The main objectives are

- i. To study the level of acceptance and adoption of E-commerce in business practices among SME segment in Mumbai.
- ii. To identify factors that may influence acceptance of E-commerce.
- iii. To understand the benefits of application of E-commerce by SMEs.

II. Acceptance and adoption of E-commerce

Electronic commerce is a novel technology and it has been most widely advertized and accepted by small to medium enterprises (SMEs) in Mumbai city. E-commerce enables SMEs to be on parity with their larger counterparts. According to the previous research on E-commerce adaptation and use by SMEs, the SMEs have achieved significant benefits such as reduced costs, increased sales and the ability to reach a global market etc. in their organizations.

E-commerce can benefit the SME's in the form of improvement in ability to compete with larger organization and operate on an international scale. With the use of e-commerce the SME's in Mumbai city can market themselves, launch new-products, get better communications, collect information, and identify potential business partners in cost effective ways. These e-activities can extend the SME's capabilities to higher turnovers and larger markets. The activities of e-commerce are such as having website browsers, websites, email, online payments, making purchases online, customer services, and video conferencing, amongst others. According to Akkeren and Cavaye (1999) the adoption of E-commerce practices is a progression and so before adopting entry level technologies we need to adopt sophisticated technologies.

The entry- level activities (website browsers, websites, email) provides necessary technological infrastructure and from this more sophisticated e-commerce activities can be designed and developed. E-commerce adoption will offer considerable benefits to SMEs largely by way of improving efficiencies and raising revenue. It also offers the creation of opportunities for new businesses. It is generally considered that governments need to take an active role in facilitating the adoption and productive use of e-commerce. Whilst it may not make economic sense for all SMEs to embrace e-commerce it is considered that there is a need to encourage SMEs to consider possibilities of e-commerce in the context of their own business planning.

i. Factors promoting E-commerce in Mumbai city

The key drivers to growth of Mumbai e-commerce are namely increased internet penetration, a rise in the number of online shoppers and an increase in per capita income. As per the

above surveys, it has been observed that the growth in Mumbai e-commerce has been stimulated by a number of factors.

- There has been an increase in the number of companies' taking up e-commerce in the latest past. All the major Mumbai portal sites have also shifted towards e-commerce instead of depending on their own advertising revenue.
- Many sites are now selling a varied range of products and services from flowers, greeting cards, and movie tickets to groceries, electronic gadgets, and computers.
- The increase in the internet penetration and rise in the number of users for 3G and 4G services have shifted the trend towards online shopping for sites such as Amazon, Flipkart, Myntra, Jabong and various other sites.
- The mobile internet speed has also risen from 54 percent to 64 percent from 2014 to 2015. Given the high speed data (3G/4G) connectivity in the rural areas, the e-commerce services have a tremendous opportunity to boost the online buying experience from the diversified regional background.
- The overall tele-density and mobile tele-density has risen to 81.8 percent (as of November, 2015) and 79.8 percent (as of September, 2015) respectively and the internet user stands out to be 354 million as of September, 2015. Henceforth, there has been a growing adoption of smartphones, tablets and increased market awareness which have further accelerated the growth of e-commerce.
- Advent of technology enabled innovation such as Digital Payment, Hyper Local Logistics, and Analytics driven Customer Engagement and Digital advertisements have enabled the E-commerce industry to grow at a much faster pace.
- Other notable factors such as the demographic dynamics (hyper connected young population, increasing standards of living, and upwardly mobile middle class), and outburst of social-media platforms have led to further growth of the E-commerce market.
- The Government of India has put new horizontal efforts in the education of tools and techniques of computer studies. The students residing in the urban areas, rural areas and business persons have been attracted towards the advance computer technologies. Hence, this has led to more usage of E-commerce platforms.
- Indian consumers are becoming more aware about the availability of varied products through websites and internet portal resulting in a usage of e-commerce platforms for further transactions.

ii. *Barriers(difficulties) to the E-Commerce Adoption*

Barriers to the acceptance of e-commerce can be broken down into factors internal to and external to SMEs in Mumbai city. The following internal factors have been cited as the main reasons for this reluctance:

- Lack of awareness and knowledge of e-commerce;
- Lack of skill and time to investigate and implement e-commerce;
- Technology 'phobia' amongst proprietors;
- Cost of implementation and lack of realization of the benefits associated with the implementation of e-commerce;
- Concerns with security and privacy;

- Poor business management generally, as evidenced by a lack of strategic direction or perspective; and
- High failure rate of new SMEs.

A number of external barriers also inhibit the implementation of e-commerce by SMEs:

- Lack of suitable software standards;
- Lack of easily accessible, independent and inexpensive advice and assistance to SMEs;
- Electronic authentication issues; and
- Bandwidth capacity and infrastructure issues.

Another real issue is the often fragmented nature of individual industry sectors and the need for regional SMEs to adopt a coordinated e-commerce effort. This is particularly important in rural and remote regions.

In reviewing the slow uptake of e-commerce by SMEs in Mumbai city it could be said that generally there is a lack of real understanding as to what e-commerce is, what it can do and how it can benefit an organization e.g., by way of the transformation of internal business practices. Further it can also be said that there is reluctance by SMEs to change and embrace the possibilities e-commerce offers due to:

- Myths about the costs associated with the introduction of e-commerce;
- Lack of strategic direction;
- Ignorance and concerns regarding security;
- Lack of understanding of supply chain issues;
- Lack of realization of the potential benefits re efficiencies and revenues; and
- Focus on costs rather than benefits.

III. Factors influencing acceptance of E-commerce

The factors that influence the acceptance/adoption of e-commerce are contextual factors, organizational factors, managerial factors and e-commerce specific factors

- Contextual factors, that lay outside the boundaries of the focal enterprise.
- Organizational factors that related to the resources, processes and structure of the focal enterprise.
- Managerial factors, given the key role played by entrepreneurial owner managers in small enterprise.
- E-commerce specific factors that related to the nature of the application and its impact.

Contextual factors may influence e-commerce somewhat more than internal information systems because of this application's necessary network externalities (Au & Kaufman, 2001). For example, the sector within which a small firm operates can either motivate or discourage e-commerce adoption (Moodley 2003). The sector shapes the information intensity of the firm's process and output; a factor positively correlated with adoption of e-commerce (Iacovou et al., 1995; Poon & Swatman, 1999).

In addition, the sector defines the nature and rivalry of industry competitiveness and the power of market forces. This is significant because pressure from customers, competitors, suppliers and trading partners often leads to e-commerce adoption (Keeling et al., 2000; Loforte & Love, 2003). For instance, in the retail sector, where E-commerce represents an attractive distribution channel, a critical mass of Internet using customers plus other aspects of consumer e-readiness such as trust on online transactions have been seen to influence small companies' implementation of e-commerce (Auger & Gallaugh, 1997; Van Akkeren & Cavaye, 1999). In addition, small enterprises whose main rivals are online can find

themselves forced to adopt e-commerce as a defensive strategy to avoid losing competitiveness (Poon & Swatman, 1999).

Another contextual influence is the enterprise's geographical location (Webb & Sayer, 1998; Daniel & Grimshaw, 2002). Countries or regions have differing levels of factors such as financial, technological and institutional e-readiness (Dutta et al., 2003). These affect both consumer and business adoption of e-commerce (Poon, 2000; Beveren & Thomson, 2002).

Organizationally, small firms have some distinct characteristics that either facilitate or inhibit e-commerce. For example, smaller firms tend to be structurally less complex than larger firms; Something that can facilitate fast decision making and innovation (Daniel & Grimshaw, 2002). Small organizations may also more readily be able to make the kind of internal changes to processes and structures that are seen as necessary to deliver the benefits of later stages of e-commerce capability (Eduard, 2001; Chen et al., 2003).

On the other hand, small size tends to restrict access to relevant innovation/adoption related resources (human, technological and financial). Hence, the findings from previous studies showing factors such as lack of e-commerce competencies (and lack of access to training) (Riemenschneider & McKinney, 2001); limited IT base (Iacovou et al., 1995); and high cost of developing and maintaining systems (Sillince et al., 1998) as either inhibiting e-commerce adoption or limiting its functionality in small businesses. The resource limitations of smaller firms mean that external change agents with access to resources – government departments, industry associations, solution providers, etc. – often have a significant influence on e-commerce adoption. The change agents' role can include anything from simple awareness raising through facilitating adoption of particular e-commerce solutions to designing the modus operandi of the new e-business (Brown & Lockett, 2001; Elsammani et al., 2004).

In terms of managerial factors, smaller firms also tend to differ from larger firms. They are characterized by highly centralized management (Longenecker et al., 1994; Mirchandani & Motwani, 2001) and by an illdefined distinction between owner and management (Cloete et al., 2002). Hence, the tendency for one or two individuals in an owner-manager role to have a disproportionate impact on e-commerce adoption. The enthusiasm and commitment of these individuals is found to have a significant influence on the adoption process (Harrison et al., 1997; Grandon & Pearson, 2003). So, too, does their level of e-commerce skills and their attitude to innovation.

Finally, the specific nature of e-commerce as a technology has been found to affect its adoption. The trial ability ("the degree to which an innovation may be experimented with on a limited basis") of the application compared to other IT applications has encouraged its adoption (Seyal & Rahman, 2003:12). So, also, have the technical advances which are reducing the skill levels required to build at least the first, entry-level stage of e-commerce. These have allowed small entrepreneurs to get a foot on the e-commerce ladder without outside assistance (Elsammani & Scown, 2000).

Entrepreneurial adoption is also impacted by the touted potential of e-commerce To increase national and global visibility (Alexander, 1999), to expand market reach (Daniel & Grimshaw, 2002), to save on market coordination and transaction costs (Mehta & Shah, 2001), and to enhance business information access and exchange (Dutta & Evrard, 1999). Following the tenets of theory on the diffusion of innovation (Rogers, 1995), rather than any objective measures

of the technology, it is entrepreneurs' perceptions of e-commerce that discriminate e-commerce adopters from non-adopters: perceptions of its trial ability, perceptions of the benefits it offers relative to other technologies; perceptions of its compatibility with their work, and so on (Thong, 1999; Kendall et al., 2001; Mirchandani & Motwani, 2001; Riemenschneider & McKinney, 2001; Cloete et al., 2002; Grandon & Pearson, 2003; Lertwongsatien & Wongpinunwatana, 2003). Continuation of investment to expand beyond entry-level stages of functionality may depend on actual benefits from previous e-commerce stages though, again, decisions will be guided by perceptions (Daniel & Myers, 2000; Loforte & Love, 2003; Elsammani et al., 2004).

IV. Benefits of application of E-commerce by SME

The e-commerce sector in India is likely to cross USD80 billion by 2020 and USD 300 billion by 2030 and is already changing the way small and medium businesses operate in India. The SME sector accounted for more than 17 percent of GDP in the year 2014 while contributing to 45 per cent of the nation's industrial output and 40 percent of total exports. The SMEs in India add over 1.3 million jobs per year. By embracing e-commerce, Mumbai SMEs shall achieve significant advantage in terms of revenues, sales and margins. The other benefits include improved market reach, access to new markets, cost savings in marketing & advertising and communication spend, customer acquisition and improved customer. E-commerce brings huge benefits to the organizations, including (i) improved productivity by creating new relationships through customer/supplier and other strategic partners (ii) improved cost and savings in transaction costs (iii) Increased speed of business (iv) improved transaction efficiencies (v) increased market places by accessing a wide range of markets. In addition, e-commerce can be used by business organizations including the SMEs for various purposes such as communicating with their customers and suppliers, promoting their goods and services, as well as providing extensive information about their products and services (Cosgun & Dogerlioglu, 2012).

There are numerous benefits or advantages associated with the growth of e-commerce in Mumbai.

- Consumers are less wary of buying services like train or airline tickets online, and sellers can avoid the logistics and delivery problems associated with physical goods.
- The B2B players have tied themselves with the banks and other financial institutions for supply chain finance. This step will help in improving access to credit. The B2B E-commerce have brought with it efficiency, convenience, choice, reach, and lower transactional cost for buyers.
- E-commerce builds on a traditional commerce by adding flexibility and speed offered by electronic communications. This can facilitate efforts to enhance operations that lead to substantial cost savings, as well as increased competitiveness and efficiency through the redesign of traditional business methods.
- Mumbai SMEs have long suffered from the "missing middle" syndrome. The Mumbai SMEs were not developing to become middle-sized enterprises for many years and also no signs of transformation. With the advent of e-commerce, many of Mumbai SMEs are using e-commerce platforms. It is expected that

this will help in growing of their businesses and also generation of employment.

- Traditional SMEs have always focused on their core operations and refrained from experimenting with advanced technologies. E-commerce have helped the technology enabled SMEs to challenge the status quo and grows significantly over the last few years. Figures says that 98 percent of technology enabled Indian SMEs participate in the country's share of export revenues whereas only 11 percent of the traditional SMEs export goods and services.
- E-commerce transcends geographic boundaries and levels the playing field by enabling visibility and trade across buyers and sellers who are located in distant geographies. Further, online transactions supported/enabled by reputed e-commerce organizations also allay fears rooted in perceived trust deficit with features such as rating systems, feedback mechanism, blacklisting, payment options and tools, security and trust certificates.
- In a highly competitive market, SMEs need to improve access to new customer segments and reach customers in all corners of the world. This is where e-commerce comes in to improve their competitiveness and provides businesses a platform to achieve on a truly global scale. Eighty five percent of the SMEs who adopted e-commerce believe that it is cost effective medium to grow sales. It has been found that SMEs who actively adopted the internet for their business activities boasted of 51 percent higher revenues.

Conclusion

In this paper we have reported the research on the acceptance and adoption of e-commerce amongst small businesses in the manufacturing and services sector in Mumbai city. We identified the influence of various factors on e-commerce adoption. This study also reported some of the barriers to the adoption of electronic commerce Also It has been addressed how small business perceive the potential benefits of e-commerce and looks at their consequent adoption of e-commerce activities in their own organizations.

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