

# A Study on the Emergence of SMEs & e-Commerce

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**Abstract**– The Covid-19 pandemic aggravated the effects of economic slowdown. With the closure of brick-and-mortar stores during lockdowns, restriction on physical movement of consumers and resulting rapid decline in sales businesses were forced to turn digital and go online. It was this struggle for survival that forced the small and mid-sized enterprises (SMEs) to enter the international e-commerce arena. This article examines the scenario that propelled the SMEs into the global e-commerce, evaluates the present scenario and explores the way forward. The article makes addition to business research literature by presenting a probable picture of what the future would look like for the SMEs in a world where business scenario is being increasingly shaped by rapid development in information technology, especially in the post covid era.

**Keywords**– SMEs, e-commerce, pandemic, emergence, electronic, commerce, digitization, transformation, electronic supply chain management, supply chain management, SCM, e-SCM.

## 1. Introduction

The Covid-19 pandemic changed the world in various ways. It changed every aspect of modern man's life – from education to healthcare, from tourism to shopping, from dining to entertainment. While economic activities slowed down, there was surge in e-commerce powered by rapid digital transformation of businesses.

The dramatic rise in e-commerce was facilitated by the movement restrictions induced during Covid-19 [1] and resulted in shifting the paradigm for markets globally. The absence of brick-and-mortar stores, dwindling customer bases due to the global pandemic coupled with economic slowdown resulted in SMEs changing their business format – a struggle for survival. A large number of the SMEs rapidly adopted the new ways of doing business, e-commerce.

Since SMEs are likely to play an important role in the industrialization and progress of a nation and e-commerce is considered to be a strategy for fast development growth, especially by small and medium sized businesses (SMEs)<sup>1</sup> this study focuses on the usage of e-commerce by SMEs [2].

## 2. Literature Review

E-commerce or electric commerce refer to business activities that are undertaken using a digital platform. It uses the web and the electronic media for dealing in both goods and services. In simple words, e-commerce is the process of buying and selling commodities using the Internet, mobile applications and other electronic means. E-commerce is concerned with both online retail and electronic transactions [3]. The embracing of e-commerce by small to med-sized enterprises and its diffusion into the community continues to remain a crucial area of investigation in the information systems literature.

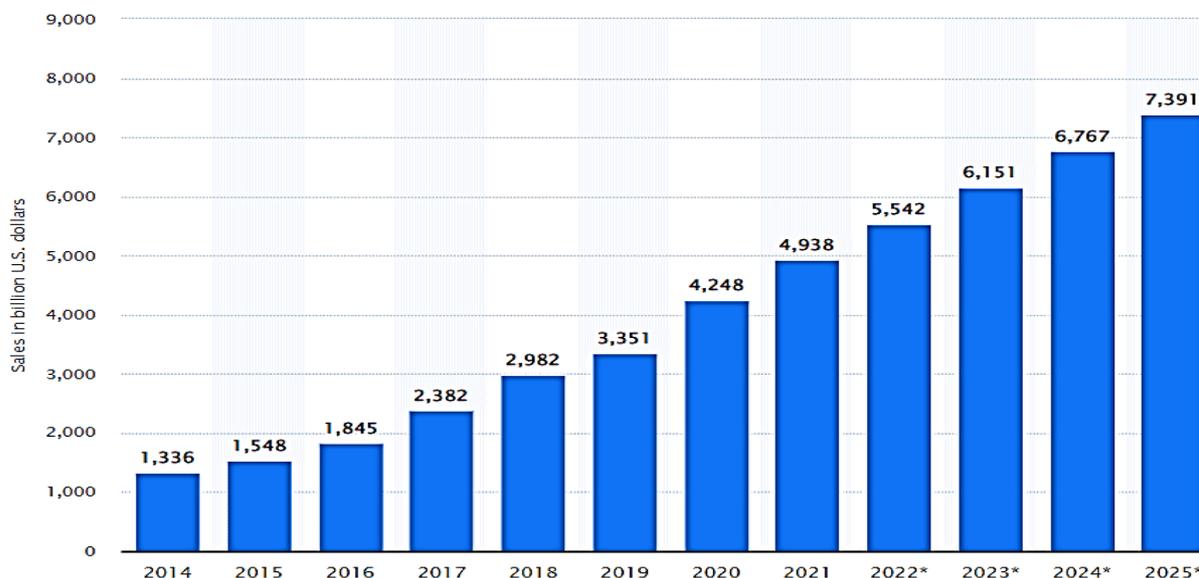
### 2.1. Reasons behind growth of e-commerce

The last twenty years or so have seen e-commerce platforms slowly creeping into the daily lives of people across the world. This innovative structure that relies upon technological progress has ushered in a new era of commerce. Businesses are using digital marketplaces, largely, in order to maintain pertinence and competitiveness [4]. Amazon and Alibaba are online behemoths, renowned for the fantastic deals and the convenience of purchasing that they offer to their customers. Speed and ease of access has turned e-commerce into the favored way of doing business in modern times. When compared to physical stores, e-commerce offers easy sifting through of extensive product database by customers without having to leave their house [5].

E-commerce features as one of the key components of modern digital economy [6]. Technological advancement in logistics and distribution makes it

possible for almost all businesses to transact and cooperate at the global level. Even small-sized businesses with local orientation are compelled to position themselves in a global context for surviving the challenges of the new business environment [7]. Thanks to the global pandemic, as lockdowns and social distancing turned out to be the new normal,

there was a surge in enterprises and customers going digital, procuring and offering larger number of goods and services online, increasing the share of e-commerce in global retail trade to approximately 17% in 2020 from 14% in 2019 [8].



**Figure 1.** Global Retail E-commerce Sales (2014-2025) in billion USD [9].

Retailers have put billions of dollars in e-commerce investments, acquisitions and partnerships over the last two years specially to tide over the pandemic. The lion's share of funding has gone towards construction of supply chain; expansion into novel segments and newer territories; acquisition or consolidation; product innovation, product offerings and marketing [10]. These resulted in building logistics capabilities, that enabled last-mile, asset-light tactics such as ghost kitchens having kitchen equipment and facilities without any dining area for walk-in consumers and dark stores having retail distribution centers catering exclusively to online shopping, in addition to product portfolio investments for building digital capabilities in blockchain and artificial intelligence (AI) [11].

## 2.2. E-commerce & SMEs

Going global became necessary for businesses. Using the Internet e-commerce has vastly increased economic interactions [12]. These linkages have extended down to small and mid-sized businesses and households and helped them reach out to the world in general [13]. Small and medium enterprises have a noteworthy influence on a region's economy.

They account for 50-% and over 65% of employment generated by the private sectors in the US and the European Union, respectively, and contribute almost 40% of national incomes of emerging economies [14].

A combination of technical innovation and regulatory reforms has provided greater Internet accessibility resulting in the expansion of electronic commerce beyond transactions occurring between known business or parties to a more complicated network of business activities where SMEs are increasingly becoming more involved.

Along with facing unvarying headwinds caused by geopolitical uncertainties, SMEs are now struggling to handle the extraordinary challenges - economic, business and social – presented by the COVID-19 pandemic [15]. Nevertheless, adoption of e-commerce has contributed towards advancement of business processes and is now a crucial consideration for SMEs across the world.



**Figure 2.** How e-commerce helps SMEs to grow

SMEs had been quick to recognize the benefit in taking their products online. They saw the potential in using e-commerce for increasing exposure, reaching out to audiences at home and abroad using the internet and search engines. SMEs also understood that marketing and client support using blogs, social media and websites, are more advanced yet more less expensive compared to traditional advertising campaigns and they could benefit from Analytics that made tracking customer preferences and delivery of customized messages much easier [5].

### 2.3. Present Scenario

This is an era of globalization and several markets are turning global and becoming increasingly competitive. The recent growth and development of e-commerce has changed the pattern in which global markets function [4]. A key effect of Covid-19 is the recognition or irrelevance of international borders — so long as internet connectivity exists [11].

Ecommerce appeared as an innovator, opening up numerous windows of opportunities for a wide array of industries and investors. Proving to have a higher cost-effectiveness compared to conventional modes of commerce, E-commerce is now drawing increasing attention from both businesses and customers, local and international [3]. The SMEs have also come within its fold.

#### 2.3.1 The opportunities

Thanks to novel technologies e-commerce now provides consumers with real time access to world markets while making it possible for producers to reach consumers for instant supply of goods and services in previously unimaginable ways [16]. Opportunities are huge. Adoption of e-commerce by SMEs promises to boost revenues and margins for the businesses, can improve their market reach, it can open up new markets and create opportunities for customer acquisition, can help in substantial cost savings especially with respect to marketing and communication, and last but not the least helps in providing superior customer experience [17].

There has been significant evolution of the seller community over the last few years which led them to understanding the worth of superior customer experience [18]. Digital marketing using social media opens up opportunities to reduce costs, improve brand awareness, build wider client base and increase sales [19].

Through the COVID waves SMEs have been able to survive leveraging their ability to transform themselves digitally and serving the existing customers digitally while acquiring several new ones [20]. E-commerce explosion has created growth opportunities particularly in South East Asia where there is a plethora of SMEs that are family run and cater to the local markets only [21].

Customer satisfaction has been substantially enhanced through the employment of online platforms which has contributed to the increase in customer loyalty and affected economic growth of a community and hence a country, indirectly. This phenomenon makes a plethora of opportunities available for development and utilization in the marketing of SME products and services across all industrial sectors [22].

#### 2.3.2 The challenges

Significant challenges exist as negative word-of-mouth spreads faster through electronic media and companies are constantly under pressure to maintain superior product quality and provide high customer satisfaction. Cut-throat competition demands intrusive and aggressive online brand presence [23]. Physical stores continue to constitute 60% to 70% of overall retail sales [24]. Rest is hogged by retail giants such as Amazon leaving very small piece of the pie for the SMEs. With novel business channels making way into the market every day,

organizations are rushing to offer superior customer experience integrating all touch points. Haste often causes organizations to upload inadequate product information, with glitches such as missing photos or wrong inventory counts [25].

As e-commerce volumes continue the rapid upwards journey, companies need to support quicker and more supple delivery options such as next-day or same-day delivery (offered by Amazon) and curbside pickup (offered by Pizza Hut) [26]. For SMEs resource constraints may make offering such services extremely difficult resulting in losing customers. Also, the ones succeeding have entrepreneurs or managers with higher education and stronger asset base [21].

SMEs in developing countries continue to lag behind in adoption and incorporation of e-commerce technology into their businesses [27]. Small enterprises usually have to deal with higher number of constraints when it comes to accessing finance compared to their larger counterparts, specifically during the times of economic crises [14].

## 2.4. Impact on Supply Chain Management (SCM)

At present e-commerce is being used for rapid transformation of the human race into an information society which is likely to significantly influence supply chain management [2]. Supply chain, that was hitherto considered as the invisible force behind retail, has now moved into the spotlight.

The key ways in which supply adapts to the novel e-commerce wave is through transformation of entire supply chain infrastructure, including warehousing and logistics. From operational and equipment standpoints, logistics and warehousing enterprises have and must continue to adjust to new procedures [28].

Supply chain management (SCM) if implemented successfully can provide SMEs a competitive edge over their rivals. However, because of dearth of resources and focus SMEs in developing countries confront challenges in SCM implementation [29].

The pandemic came in the form of a major disruption of supply chains like “an earthquake or tsunami” [30] The overall constriction of supply chains has been caused by ubiquitous business-to-business e-commerce and is expected to have significant influence over inventories and the relevant costs [31].

### 2.4.1 The growing importance of electronic supply chain management

SMEs adopted e-commerce and Electronic Supply Chain Management (e-SCM) resulting in high business process performance [32]. E-SCM is the outcome of the incorporation of e-commerce into the procedure of SCM. Electronic supply chain management (e-SCM) is collaborative use of technology to improve the operations of supply chain activities as well as the management of supply chains [33].

Amazon, the online retail giant, is among the best specimens of effective implementation of e-SCM, a supply chain management methodology that exploits the advantages derived from the influence of the internet on modern-day business operations. Accelerated service is among the key motivations that drive companies to adopt the usage of electronic supply chain, and it has frequently been employed as an alternative method of servicing the customers. It enables companies across industries to present their products and services online, round-the-clock and to all buyers across the globe, irrespective of physical or geographical boundaries and nationalities [34].

The application of electronic supply chain management by SMEs generates various benefits. It helps in operating cost reduction, improving service quality, lowering order cycle time, cutting down inventory levels, enhancing customer satisfaction and developing global competitive advantage [29].

## 3. Research Methodology & Research Contribution

This research uses literature review to study the evolution of SMEs in the era of e-commerce. We have reviewed books, news articles, magazines, scholarly articles, and any other resources that are pertinent to the subject matter or area of research and in the process, presents an explanation, a portrayal, a synopsis of the emergence of SMEs in changing times [35].

### 3.1. Literature Review

Literature review has gradually become more relevant due to the rapid development in business research leading to proliferation of knowledge which makes it harder for researchers to stay abreast of all the up-to-date and relevant information pertaining to any faction of business research or scrutinize the available evidence.

This is purely theoretical research that concentrates on development of SMEs in the context e-commerce and e-SCM and is based principally on bibliographic sources.

### 3.2. Research Contribution

The article makes further addition to the volume of business research literature. It presents a probable picture of what the future would look like for the SMEs in a world where business scenario is being increasingly shaped by rapid development in information technology, especially in the post covid era. It highlights the need for SMEs to undergo rapid SCM transformation and adaptation in order to remain viable.

## 4. The future of e-commerce, e-SCM and the way forward for SMEs

In this era of globalization, organizations are fast adapting their operational and supply chain structures in order to remain viable in this ever-changing environment [36]. Small and medium sized retailers are expected to emerge winners in the retail sector, exerting higher level of control over international retail owing to the shifting of power centre of the international retail industry to third-party e-commerce platforms. This will make SME retailers emerge as a domineering sector and it will also lead to international sourcing moving to freelance or independent sourcing experts, who are capable of working with several purchasers for common procurement resources, from traditional in-house sourcing experts [37].

### 4.1. SMEs will continue to benefit from brick-and-mortar format

As has already been mentioned, the lion's share of retail space still belongs to brick-and-mortar stores. As the pandemic recedes shoppers are returning to physical stores creating sustainability challenges for online retail. Amazon's "Just Walk Out" or JWO technology, that allows customers to enter a store, take what they desire, and leave, are most likely to impact both online grocery store shopping, convenience store shopping as also apparel shopping, as indicated by Amazon's latest foray into physical fashion retailing [38].



Figure 3. JWO store format

Recently the retail giant seems to be putting a lot of effort in making these stores successful which is likely to shrink the e-commerce market [39]. The SMEs who have just started going digital gradually may not be affected as much as those who have completely transpired into the online format. Developing countries, from this angle are at an advantage as brick-and-mortar format for SMEs is still at large.

### 4.2. Digital and Structural Transformation

Future of commerce is digital, and the structural changeover is necessary for survivability of SMEs. It allows them to compete globally by providing a level playing ground. Obvious outcome of presence in virtual marketplace is the rise in potential opportunities. It is impossible for policy makers and managers to neglect the present transition as firms, including SMEs, can only decide to be a part or not of this global phenomenon [4].

Ecommerce businesses, especially retail, have started seeing novel changes behavior when it comes to shopping, and these changes over the past couple of years are showing signs of permanence or at least persistence over a considerably long period [40, 41]. Adoption of e-commerce and e-SMC by SMEs will act not only as key contributors towards the progression of their business processes but will also become a crucial consideration in modern SMEs [32].

A lot of SMEs, especially in the developing countries, belong to the informal sector. Not all are well equipped for digital transformation. This makes it imperative for the policymakers to extend social protection to these players to ensure that they are less susceptible, can better handle volume of risks and, eventually, be further growth oriented [21].

For SMEs absence of adequate digital options for maneuvering supply chains causes difficulties; often

raw material is procured from several vendors, disintegrated players and other SMEs. Additionally, conventional supply chains are full of expedient processes [20]. Streamlining necessitates adoption of digital technology in supply chain management.

### 4.3. Linking Digital Marketing, e-SCM and Customer Loyalty

Sales strategies have been developing and will continue to develop rapidly aided by the emergence of innovative media conduits which can be used for marketing strategies, for instance Facebook, Instagram, Twitter, YouTube, and Google [42] and making it possible for sellers to reach out to consumers at any place or time. The use of Internet and online media offer several interactional and transactional benefits. Online media is a huge positive contributor from the perspective of customer loyalty enhancement.

A study uncovered that digital supply chain constituted using online customers have a positive and significant effect on customer satisfaction [43]. A further study observed that the best product publicity occurs through satisfied customers. Digital supply chain tends to have a positive and major effect on the satisfaction derived by the customers of SME. Satisfied customers are the ones who are most likely to recommend the products and services they have used and experienced, to others by means of digital supply chain in the form of text, likes or ranks on websites, social media, blogs, and other online platforms [22].

Yet another study has revealed that the SME firms employ online social media in marketing with 4 key objectives. These objectives are -

- (a) branding,
- (b) economic performance
- (c) customer satisfaction, and
- (d) community gathering.

It is imperative for firms across industries and statures to develop capabilities that can help to handle uncertainties and acquire competitive advantage because of supply chain responsiveness. Efficient supply chain management increases operational resilience and at the same time enhances customer satisfaction. Customer satisfaction is a paradigm that is essential for expansion of customer base through enhancement of customer loyalty [22]. In the modern era, the success of a business in a highly competitive atmosphere is greatly affected and determined by its supply chains and not the

autonomous efforts put in by the business [44]. There is a strong relationship between products and digital supply chain which is crucial for the maintenance of customer loyalty to SME products. A good digital supply chain will allow customers to gather adequate knowledge about a product and in the process gain a better understanding of the product.

A substantial number of studies have confirmed that assimilation and collaboration in supply chain management is capable of providing important benefits to the SMEs, in an industry, which include value addition, value creation and enhancement of efficiency and customer satisfaction [45] that is epitomized by declining inventory levels, enhancements in both product quality and service quality and less lengthy product development cycles [44].

The application of electronic supply chain management has the ability to lessen certain problems pertaining to supply chain management through application of such procedures as sharing of demand by clients with suppliers which forms a part of efficient consumer response (ECR), making the suppliers responsible for the availability of articles using inventory that is managed by the vendors, significant reduction of human error by way of building checks and balances into the system, reduction of inventory throughout the entire supply chain aided by superior demand forecasting and much faster replenishment of inventory levels, improvement in the availability of information pertaining to prospective suppliers and components, for instance through the utilization of online marketplaces [33]. This will prove to be particularly helpful for SMEs in expanding their businesses and maintaining their viability in the post covid business scenario where customer behavior has undergone significant changes that are most likely to perpetuate and competition has grown stiffer.

## 5. Conclusion

Social media and the internet have changed how consumers behave and how businesses conduct themselves. The Covid situation has highlighted the need for provision of access to digital infrastructure and training for enabling SMEs ride the e-commerce wave. Despite slow return of pre-covid normalcy, the SMEs must change over from conversational businesses and adopt digitization for gaining competitive advantage as competition stiffens. Transformation still remains a huge challenge for

SMEs who are starved of resources. But they eventually have to transmute for survival.

The customer satisfaction and building strong company-consumer relationship is the key to win the e-commerce or brick and mortar business regardless. Also, the SMEs can leverage the facilities provided by the retailers to reach out to customers efficiently and fast. A robust supply chain with un-interrupted customer fulfilment will help the companies to get ahead of the game and this can be done by proper planning and forecasting of demand, building strong suppliers including SMEs relationships and understanding the geo-political scenarios and creating mechanisms to leverage suppliers from different part of the world to have the flexibility in customer order fulfilment.

This article delves into the past scenario and evaluates the present scenario especially in the light of the pandemic to gain an understanding of how the future can pan out for the SMEs who are constantly grappling under the scarcity of resources. It is evident from this purely theoretical study that the future survival of SMEs would be extremely hard due to growing competition and they need to keep abreast of emerging consumer behavior trends and the development in information and communication technology in order to make them fit to handle changing business circumstances amidst growing uncertainties.

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