

**SMEs PERFORMANCE WITH THE USE OF
E-COMMERCE IN PAKISTAN**



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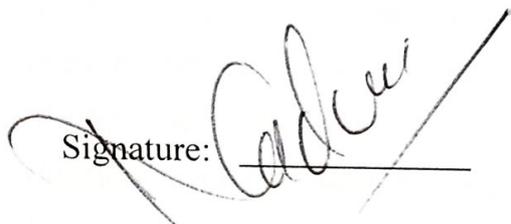
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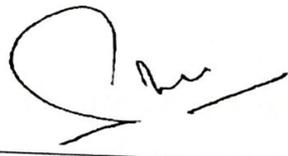
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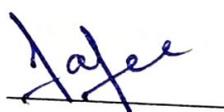
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ABSTRACT

Businesses and customers increasingly turn to digital economic structures and information networks as the new business reality as they search for convenience in acquiring goods and services. The main objectives of my study are the success of SMEs and the relative merits of brick-and-mortar stores vs. wholly online ones. After the U.T. Policy 2019 in Pakistan, our company is moving into a new phase of digitization, but there are still several issues inhibiting proper growth. This study focuses on the post-E-commerce performance and effects of SMEs. The research framework for this study is based on an RBV framework and a theory of technology adoption and application (Abu, Jabar, & Yunus). Unfortunately, these digitalization attempts have been ineffective. SMEs of Pakistan still need the complete digital capabilities necessary to take advantage of developed e-commerce resources and boost their performance.

Additionally, to enhance the performance-oriented corporate environment, the low acceptance rate of e-commerce has hindered the digitization rate. As a result, the current study has looked into the variables that affect how SMEs use e-commerce to enhance their operational efficiency. SME owners who switched to e-commerce and only conduct business will be the subjects of the quantitative study.

Keywords: Use of E-Commerce as a Facilitating Condition, Testing –, Effort Expectation, and E-Commerce Use

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CHAPTER 1

INTRODUCTION

The time period during which we could count on our fingertips and the globe has been close by, by just a single tap to look up, investigate, and buy goods and services anywhere in the globe. Trade has thus faced a new series of challenges as a result of the wide adoption of digitalization. As the physical world progressively replaces the internet (John, 2003), businesses like Alibaba, eBay, and Amazon have benefited. The global economy is now dominated by Amazon. E-commerce, or EC for short, is the act of purchasing and selling products and services through the internet.

Academics have concentrated on creating and approving EC in recent years (Safia, Chai, et al. 2019). E-commerce, however, has its roots in the 1970s, when huge firms used electronic money transfer networks to conduct business with one another (dos Santos, Sabino, et al. 2017).

By the adoption-performance model, this study is also designed to compare the characteristics of the two adapters. The purpose of this study is to ascertain how various elements interact (performance expectancy, effort expectancy, social influence, facilitating condition, and perceived risk). The second study examines the connections between the adoption of E-commerce and the performance of SMEs. Both the UTAUT theory and the comprehensive theory on organizational and ICT adoption were used to achieve these goals.

The advancement of information and communication technologies can be attributed (dos Santos, Sabino, et al. 2017). Also, the increase was aided by the World Wide Web's inception (in the early 1990s). The volume of users on these platforms and the promotion of media use to support consumer behaviour (The Evolution and Development of E-Commerce Market and E-Cash. 2011).

The effort expectancy has historically been slowed down in literature, which has had a major favourable effect on actual use behaviour (UB) (Lee, 2009; Ahmad et al., 2012; Cohen et al., 2013; Ndayizigamiye, 2013; Chiu & Ku, 2015; Ahmed et al., 2017). SME owners anticipate discovering that conducting business through e-commerce will be simple. E-commerce is also thought to be a less reliable technology that is simpler to use and understand. It is straightforward and takes less time to complete transactions. Based on the knowledge that E-commerce is simple, the construct of effort expectation has been addressed by SME operators.

Small and medium-sized enterprises (SMEs), which are essential to the stability and growth of the region's economy, account for a large portion of the region's entrepreneurs. Because of SMEs (small and medium-sized firms), a country's economic growth and quality of life are influenced. 2009's Rohra and Panhwar confirm that the majority of industrialized countries are aware of the role that small and medium-sized businesses (SMEs) play in the health of their economies. Small and medium-sized businesses of all sizes have made a substantial contribution to the growth of the economy by generating income and jobs. These types of policies, which maintain good living standards and boost people's wealth, are beneficial to a nation's overall development.

According to the findings of earlier studies, perceived risk negatively affects actual user behaviour (UB) (Dinev et al., 2006; Lee, 2009; Wessels & Drennan, 2010; Lai et al., 2014). SME owners will employ e-commerce in this study. Performance of Small and Medium-Sized Enterprises and the Usage of E-Commerce as a Platform for Secure Trading, Protected from Hackers, Equipped with a System to Protect Critical Company Information, Free from Sales Exposure, Free from Unnecessary Financial Risk, and Mature Technology The degree to which SME operators believe that adopting e-commerce to conduct their commercial activities has led to uncertainty and undesirable consequences has thus been described as a perceived risk. According to research (Zhu

& Kraemer, 2002 & 2005; Al-Dmour & Al-Surkhi, 2012; Azeem et al., 2015; Mohammed, 2015; Popa & Soto Acosta, 2015; Gregory et al., 2019; Macchion et al., 2017; etc.), using e-commerce improves the performance of SME businesses (Aremu, Shahzad, & Hassan, 2019). This study found that businesses that employ e-commerce operate more profitably. The effectiveness of SMEs is typically evaluated from four angles: their financial impact, their impact on learning and growth, their impact on internal business processes, and their impact on customers. Consequently, the concept of SME performance is defined as the extent to which SME operators can execute their objectives economically, effectively, and efficiently.

In this research, the framework was modified to acknowledge the scope of the study of E-commerce adoption and SME performance. First, many factors that influence E-commerce use are rooted in UTAUT theory. Secondly, it focuses on using E-commerce as a digital capability and its influence on SME performance. E-commerce use in the research framework is seen as a bridge to interlink the UTAUT theory. Therefore, the research framework adds value to the new knowledge exploration and prevents the explanatory power from enhancing understanding.

The performance and competitiveness of the economy as a whole is strongly influenced by small and medium-sized enterprises (SMEs). (Minniti, Bygrave, et al. 2006). Small and medium-sized businesses (SMEs) play an essential role in Pakistan's economy in technical innovation, sourcing from large to small cottage industries, and selling economic regeneration. SMEs have a significant impact on poverty reduction and the expansion of the national financial system. It could provide jobs and have a positive impact on the neighborhood. Developing countries like Pakistan's economy are influenced by their small and medium-sized enterprises (SMEs) (Khalique, Isa, et al. 2011). According to Pakistan's 2005 Population Census, there are an estimated 3.2 million businesses in Pakistan. About 78 per cent of Pakistan's nonagricultural workforce by small and

medium-sized enterprises (SMEs), which account for more than 90 per cent of all private businesses (PBS, 2011).

More than a third of Pakistan's economic output is generated by small and medium-sized enterprises (SMEs). It also accounts for 25 per cent of synthetic products exports and 35 per cent of new production fees. Regarding SME activity, retail, wholesale, restaurants, and hotels make up 53 per cent. Industrial institutions account for 20% of SME activity, whereas transportation services account for 22%. (PBS, 2011). In recent years, the Government of Bangladesh (GoB) has devoted significant time and resources to fostering the growth of entrepreneurship and small and medium-sized enterprises (SMEs) in Pakistan. In October 1998, the GOP established the Small and Medium Scale Development Authority intending to foster growth in this sector. The Goop has also established SME and microfinance banks. In addition, most commercial banks use SME-specific divisions per GOP rules (Bhutta, Rana, et al. 2008). Regardless of their economic significance, Pakistan's small and medium-sized enterprises (SMEs) need to adapt to the government's monetary liberalization initiatives and capitalize on the world's expanding markets. Existing issues include a lack of adequate enterprise data infrastructure, a strength disaster, a lack of strategic planning, a lack of financial literacy, unskilled human resources, and businesses' noncompetitive lending practices (Bari & Cheema, 2005) E-commerce, or electronic commerce, is defined as "the exchange of information, goods, and services over personal computer networks." According to (Kalakota & Whinston, 1997), businesses and transaction parties are changing their practices. It is widely acknowledged that e-commerce can stimulate economic growth in developing nations more than in established economies (Khaskheli & Jun 2016). Developing countries may have more space for growth because of their higher populations and vast untapped marketplaces spread over a broad geographic area. Research indicates that for small and medium-

sized businesses (SMEs), electronic commerce is a crucial tool for growth and survival and a necessity.

UTAUT theory does not consider perceived risk as a determinant. The monetary transaction through an ICT application. The adoption has to consider the perceived risk. Most potential respondents agree that perceived risk that does not post a relationship with the use of E-commerce further examination to verify this relationship. Shahzad et al.

According to (Molla & Licker, 2005), e-commerce enables small and medium-sized enterprises (SMEs) to reduce transaction costs and eliminate the need for middlemen, resulting in a more convenient shopping experience. Effort that is more academic is required to understand the impact of e-commerce on small and medium-sized businesses in developing nations. There is much literature on the value of e-commerce for small and medium-sized businesses in developing nations, particularly Pakistan. In this research, E-commerce and small and medium-sized enterprises (SMEs) in Pakistan are intertwined, which helps shed light on those connections and offers suggestions for how SMEs in Pakistan might benefit from implementing e-commerce. We also discuss the significance of small and medium-sized enterprises (SMEs) in Pakistan.

1.1. ANALYZING THE PERFORMANCE OF E-COMMERCE IN PAKISTAN

In 2021, the Pakistani e-commerce industry was to rise by 29%, thanks to a 45 percent increase. E-commerce revenues continue to expand. Existing as well as new markets have the potential to grow. E-commerce is a helpful tool for increasing sales, simplifying business, and allowing small and medium-sized enterprises (SMEs) to work more quickly due to the reduced number of required business transactions. It is easier to utilize e-commerce than face-to-face enterprises since studying and handling small firms requires less time and effort.

1.2. THE DYNAMICS OF E-COMMERCE PERFORMANCE IN PAKISTAN

The era of data is here, thanks to the Internet. With the proliferation of information and the increasing speed at which it people is thinking styles have shifted. In the same manner, internet commerce has significantly affected consumers. Online business is booming because of the convenience, time, effort, and resources saved by online transactions. Humans are creatures of routine and familiarity. Because internet shopping is much more convenient than mall travel, these two primary considerations fuel it.

In E-Commerce, the idea of geographical boundaries and the availability of information has no barriers. Businesses in the service industry, such as airlines, travel, real estate, banking, and insurance, have swiftly migrated to E-Commerce platforms to take advantage of these dynamics.

In Pakistan, online commerce thrived during COVID-19, thanks to the ease with which information through e-platform. The customer's decision-making process relies heavily on information. The customer may complete all of his or her research on a product, its rivals, and its price from the comfort of his or her home or office, thanks to the Internet's abundance of information. All the information is at your fingertips, waiting for you to click on it. In addition, e-commerce platforms have made it possible for new business operations to increase their market reach while simultaneously making it more straightforward for customers to access the goods of well-established companies.

1.3. SCOPE OF THE STUDY

Pakistan's e-commerce penetration needs to be innovative in adopting new technology by utilizing new skills with adequate performance. SME's success depends on effort expectation, facilitating conditions with performance expectancy, which automatically influence the SME'S performance by having E-commerce. In this research approach, the UTAUT theory to examine the expectancy

ratio of SMEs in Pakistan. There is a variety of characteristics, including performance expectation, effort expectancy, and enabling situations, that influence e-commerce use.

The current approach of this study is precious in terms of Pakistan becoming the third freelancer country in the world. Therefore, we can easily conclude that this approach is helpful and valuable for the near future.

1.4. RESEARCH PROBLEM

As technology advances in the twenty-first century, the commercial potential for both domestic and foreign enterprises grows exponentially. Communication has become a complex and ever-changing job. Adopting excellent marketing tactics is essential for firms to edge over their competitors. Online presence is becoming increasingly crucial for small and medium-sized enterprises (SMEs). The results of this study will assist small and medium-sized businesses (SMEs) in deciding whether to implement E-commerce into their operations. Businesses may benefit from this research by targeting specific groups of E-commerce users with their marketing efforts.

1.5. MANAGEMENT/POLICY CONTEXT

The research will investigate the structure, opportunities, and constraints faced by Small and Medium-Sized Enterprises (SMEs) in India. The research will center on Pakistan's small and medium-sized enterprises (SMEs). Studies published thus far have focused primarily on the role of e-commerce in large corporations relative to small and medium-sized businesses. A comprehensive literature review led us to conclude that e-commerce is crucial for the growth of Pakistan's SMEs and occupies a unique position within them. The importance of e-commerce to Pakistani small and medium-sized businesses is growing (SMEs), but there needs to be more research done on it.

1.6 GAP ANALYSIS

Due to the low level of e-commerce adoption, digitalization to improve the performance-oriented business environment. For this reason, a great deal of attention to the factors that influence the use of online commerce by small and medium-sized enterprises (SMEs) to increase company success.

Analysis of the effects of small and medium-sized businesses (SMEs) on online commerce could be an end in and of itself. Since the adoption of e-commerce by Pakistani SME owners is so low, a great deal of research on this topic, but there still needs to be more studies that differentiate between the two business types. Consequently, this study aims to examine these groups of e-commerce adopters to answer crucial questions regarding the most critical factors contributing to the poor e-commerce adoption and overall performance of Karachi SMEs. The study began with the question, "Does e-commerce adoption by pure-play and click-and-mortar have the same function?" It is critical to integrate e-commerce adopters into companies that from the research process because of the distinct commercial operation between click-and-mortar and pure-play enterprises (Azam & Quaddus, 2009) (Azeem, Ozari, et al. 2015) (Ndayizigamiye, 2012) (Li, Yang, et al. 2014) (Zhu & Kraemer, 2002). To better understand the characteristics and habits of business owners in the various categories, our research focused on click-on-and-and-mortar and pure-play respondents. The study's findings provide the government and e-commerce operators with a new perspective on how to market to these early adopters through e-commerce.

The majority of previous research has shown that having high expectations for performance has a significant influence on actual performance (Bock, Lee et al., 2012) (Yang, 2010) (Ahmad, Markkula et al., 2012) (Cohen, Bancilhon et al., 2013) (Ndayizigamiye, 2012) (Ahmed, Kader, et al. 2017). In this survey, small and medium-sized enterprises (SMEs) believe that implementing an e-commerce strategy would increase their company's success.

Prior research has demonstrated that individuals' expectations of effort have a substantial effect on their actual usage behavior (UB) (Bock, Lee, et al., 2012) (Ahmad, Markkula, et al., 2012) (Cohen, Bancelhon et al., 2013) (Ndayizigamiye, 2012) (Chiu & Ku, 2015) (Ahmed, Kader, et al. 2017). SME owners believe that understanding and employing e-commerce will facilitate their business transactions. According to past research, a favorable environment has a significant impact on actual usage behavior (Williams, 2009) (Yang, 2010) (Adam, Kotze, et al., 2011) (Ahmad, Markkula et al., 2012) (Al Mursalin, 2012) (Cohen, Bancelhon, et al. 2013) (Indahwati & Afiah, 2014) (Indahwati & Afiah, 2014) (Tai & Ku, 2013) (Serben, 2014) (Chiu & Ku, 2015) (Yueh, Lu et al. 2016) (Ahmed, Kader, et al. 2017). Research suggests SME owners are likelier to adopt e-commerce if they have sufficient resources and talents, access authority assets, accurate assistance through a net-shop phone company, and guidance from marketplace operators.

1.7. OBJECTIVES OF THE STUDY

- To investigate the role of SME's performance with the use of E-commerce.
- To investigate the role of SME's performance with the use of E-commerce on performance of expectations.
- To investigate the role of SME's performance with the use of E-commerce on effort expectations.
- To investigate the role of SME's performance with the use of E-commerce on facilitating condition.

1.8. RESEARCH QUESTIONS

- Is performance expectancy has a positive influence on the use of e-commerce?
- Is effort expectancy has a positive influence on the use of e-commerce?
- Is facilitating condition have a positive influence on the use of e-commerce?
- Is the use of e-commerce has a positive influence on SME performance?

E-commerce is one of Pakistan's fastest-growing industries. However, small and medium-sized enterprises (SMEs) have a low penetration rate, resulting in a loss of income and an inability to create jobs. As the post-pandemic era dawns, Pakistani SMEs are transitioning to the digital age to boost their performance.

Because of the Pakistani governments bold proposal of the country's first e-commerce policy (due in 2019), global e-commerce giants such as Alibaba and Amazon have begun investing in Pakistan. We need to focus on e-commerce since it will improve the performance of current SMEs and stimulate the emergence of brand-new start-ups and SMEs that account for more than half of the global GDP and more than six in ten jobs in high-income nations (Tech Juice).

This research will focus on small and medium-sized businesses' adoption of e-commerce. The primary objective of this study is the adoption of e-commerce by small and medium-sized enterprises (SMEs) in Pakistan. In addition, the study aims to determine what current e-commerce users anticipate from their companies and then present this information to SMEs that still need to adopt e-commerce. In addition, the study aims to determine what current e-commerce users anticipate from their companies and then present this information to SMEs that have not yet adopted e-commerce. Unfortunately, it appears that these digitalization attempts have been ineffective. Malaysian SMEs still lack the digital capabilities necessary to take advantage of developed e-commerce resources and boost their performance.

Additionally, to enhance the performance-oriented corporate environment, the low acceptance rate of e-commerce has hindered the digitization rate. As a result, the current study has looked into the variables that affect how SMEs use e-commerce to enhance their operational efficiency. We need to close the gap left by the tardy adoption of the digital market by adopting digital market skills, providing free training, purchasing software, etc. New freelancers will find embracing and capitalizing on the new niche easier.

CHAPTER 2

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

A significant Small and medium-sized businesses generate a significant portion of Pakistan's G.D.P. (S.M.E.'s). Largely, every Pakistan business this way. This best reflects Pakistan's business environment, like its small and medium-sized enterprises (SMEs). This means it is possible to categorize all types of businesses (including tiny local businesses or partnerships) under one specific definition of small and medium enterprises. Previously, the most critical criteria for defining S.M.E.s were the subject of protracted disputes and disagreements (Soomro & Aziz, 2015).

Many countries have attempted in the last few decades to determine the proper size of S.M.E.s and to overcome the obstacles that limit the growth of S.M.E.s in their countries (Dar, Ahmed, et al. 2017). S.M.E.'s are committed to expanding their reach, creating jobs, and reducing poverty while also increasing their foreign currency profits, according to economists and practitioners alike (Ali, 2013) (Berry, Aftab, et al., 1998) (Soomro & Aziz, 2015). According to (Afaqi, 2010), Pakistan was left with a shaky commercial foundation heavily reliant on agriculture. In the beginning, Pakistan's commercial sector was dominated by large-scale manufacturing, but it became a success as time passed. Small and medium-sized enterprises (S.M.E.) have been the principal focus of the first five-year plan (1955-1960).

Seventy-eight percent of the nonagricultural workforce is engaged in the S.M.E. quarter, according to Statistics Agency (2008). More than a third of the region's output comes from small businesses (G.O.P., 2005). According to the 2005 Economic Census of Pakistan, 2.96 million commercial operation devices for products and services in the United States developed devices and household units. According to the data, Punjab (65.26 percent), Sindh (17.82 percent), Khyber Pakhtunkhwa

(14.21 percent), and Khuzdar (2.09 percent) all have a strong interest in these devices. Over half of the wholesale and retail groups, 20% of commercial gadgets, and 22% of the offers zone were owned by small and medium-sized businesses (SMEs).

S.M.E. zone is still largely unregistered even with this information. Lone proprietors run most small and medium-sized businesses (S.M.E.s); only 2% heavily depend on partnerships for their success. Business growth charges data from 1970 to 1990 shows a widening disparity between S.M.E.'s' growth in production or staffing and that of their larger counterparts (Cameron, Khairuz-Zaman, et al. 2006).

According to the 'Doing Business' (D.B.D.B.) Pakistan is expected to be ranked 108th in 2020, while it was 147th in 2018. Pakistan has steadily improved its world rankings in the last five years. In terms of the 'Doing Business Rank 2020, 126,' Pakistan's ranks are as follows: starting a business (72), dealing with production permits (112), obtaining electricity (123), registering property (151), obtaining a credit score (119), paying more taxes (161), auctioning (111), and enforcing agreements (156). As a result, Pakistan performs a lesser role in global D.B.D.B. indicators on a proportional basis. For comparison's sake, the D.B.I. 2020 rankings place China at thirty-first and India at number 63. In order to start a firm, 12 separate steps take roughly 18 days to complete, while proper registration requires a total of 175 days. The 'Global Competitiveness Index (GCI)' shows Pakistan at 107th out of 122 countries in 2018, down from a high of 115th in 2017. According to GCI127, Pakistan was ranked second last among South Asian countries. An effort is underway to uncover the barriers that have kept businesses from reaching their full potential.

Finally, countries make significant financial contributions to small and medium-sized enterprises (SMEs).

Small and medium-sized businesses (SMEs) in this unique country will benefit from funding designated for them (Naveed, 2012). According to the study, India spent \$109 million, Korea \$3, 49 billion, Malaysia \$2, 22 million, Thailand \$122 million, and Pakistan only spent \$1.74 million. Pakistan was the only country that spent less than Pakistan's \$1.74 million total. He said that small and medium-sized enterprises (SMEs) are better uses of rural skills, entrepreneurship, and capital because of rapid urbanization. As a result, he argued, small and medium-sized enterprises (S.M.E.s) deserve more funding.

Pakistan's government continues to ignore the relevance of SMEs and refuses to provide them with crisis management assistance (Haque, Rasul, et al. 2007). A high-quality potential may exist in Pakistani S.M.E.s. This means that government officials, both public and private, must actively participate in the new definition of small and medium-sized enterprises (S.M.E.) in order for them to be effective (Khan & Ali Qureshi, 2007). It is among practitioners and instructors for its many advantages. With today's modern definition, world markets penetrate and Pakistani Startups in this period of globalization. Hence, it is essential to regulate the quantity of personnel, cost of total assets, revenue growth profitability, and paid-up equity (Simmons, Armstrong, et al., 2008) (Phore & Shaikh, 2010). As a result, new ideas and advancements in science and technology will be stimulated. Its focus on equity financing for small and medium-sized businesses has been determined to be a national currency development engine (Ejaz, 2012). Small medium enterprises (SME's) positively influence Pakistan's financial growth if they take on the most challenging tasks.

According to Pakistan's definition of small and medium-sized businesses, there is no standard (Dasanayaka, 2008) (Mustafa, Nakov, et al., 2019) (Rana, Khan, et al., 2007). According to Softbank, S.M.E.D.A., PBS, and the Central Bank (S.B.P.), small and medium-sized enterprises (S.M.E.'s) characterized by unique methodologies. The Federal Trade Commission of

Pennsylvania (S.E.C.P.) has categorized companies in Pennsylvania entirely under the fifth schedule of the 2015 Companies Ordinance. A small and medium-sized business, define in various ways (S.M.E.). The IFC paper employs only about 250 people, and the W.B.W.B. defines a *small firm* as one with no assets and an annual revenue of less than \$100. The total employees and the length of the corporation's assets determines whether an organization classified as a micro, small, or medium-sized (S.M.E.). The E.U.E.U. Categories small and medium-sized businesses based on their number of employees and annual revenue (S.M.E.'s). It considered small if a company has fewer than 250 employees and annual revenues of less than 50 million euros.

A country's economy and market conditions, rather than the World Trade Organization (W.T.O.), define small medium businesses (SME's). To defining a company by looking at the numeral personnel, the extent of resources invested, then the amount of revenue it generates each month. This is the basis for the vast majority of definitions worldwide. When comparing American and Pakistani criteria, it is important to acknowledge the aspect in the respective countries. Global standards for headcount and capital investment used by the S.B.P. to classify small medium enterprises (SME's). Small businesses, according to the S.B.P., have less than 50 employees and a yearly financial plan is less than approximately 25 million Pakistani currency. While medium-sized businesses. In contrast, having 250 or further workers and a twelve-monthly financial plan of up to 200 PKR each. SMB's are defined by the Stock Exchange as firms incorporated under the 1984 Corporation Act with assets ranging from 25 million Pakistani rupees (P.K.R.) to 250 million Pakistani rupees (P.K.R.). The S.M.E.D.A. approves by the State bank as most of the funding is done via banks. Each research will define a small enterprises as "any firm with fewer than 250 people and a capital investment of up to 250 million Pakistani rupees," even though the relevant criteria for defining small businesses are almost ten years old.

Only the S.M.E. bank uses the total number of possessions as a criterion. PBS remunerations have specific focus on the wider spectrum of individuals. In business's perspective, the total no. of employees and the total amount of capital employed, and the yearly net profits value all go into S.B.P.'s and small medium enterprise (SME's). There are only about 250 people employed by the IFC paper, and the W.B.W.B. defines a small firm as one with no assets and an annual revenue of less than \$100. The amount of personnel and the length of the corporation's assets determines whether an organization classified. As a micro, small, or medium-sized one (S.M.E.). The E.U.E.U. Categories small and medium-sized businesses based on their number of employees and annual revenue (S.M.E.'s). More than 250 employees and a business have fewer than 50 million euros per year qualify as small businesses. Small Medium Enterprises (SME's) to define by the World Trading Bloc (W.T.O.) determine the each countries 'market and financial conditions. The capital investment, no of employees, revenue turnover used as the beginning point. Many aspects all over the world are using these as foundations. It is important to consider these concepts in practice. The S.B.P. categorizes small-medium enterprises (S.M.E.s) by meeting the global standards for headcount and capital investment. S.B.P. describes a small business having less than 50 individuals and a yearly financial plan of less than \$25 million, a small-medium business. In contrast, 250 employees and yearly financial plan up to \$200 million.

Pakistan's stock exchange defines small and medium-sized enterprises (S.M.E.) as those companies that have a value of at least 25,000,000 Pakistani rupees (P.K.R.) under the Corporation Act 1984. (P.K.R.). According to the State Bank of Pakistan, the majority of capital controlled by banks. Any company with less than 50 employees and a desire to grow small or medium-sized enterprise (S.M.E.). For more than a decade, the criteria used to define S.M.E. have been in use. It is exclusively the total amount of properties that the S.M.E. The main banks acknowledge the

decision of providing monetary funds. PBS has paying the special attention to the major possible spectrum of individuals. The S.B.P.'s have determined the small-medium enterprises that on the business's nature, total no. of employees, and the used capital and annual net income price. The S.M.E. bank only takes into account the total number of possessions when determining whether to lend money. PBS gives the widest variety of people the utmost consideration. The S.B.P.'s small-medium enterprises definition takes into account the type of operation, the no. of employees, the quantity of investment employed, and the annual net profit price (S.M.E.) income cost.

In Pakistan, S.M.E. is elaborate as having more than 250 workers, a paid-up capital of up to Rs.25 million, the sales are approximately more than Rs. 250 million which is a large range (Kureshi, Mann, et al. 2009). In result, it is not promising to implement on the definition of S.M.E.

In addition, the employment has continued an acute alarm as well. A variation of establishments, containing PBS and S.B.P., organize S.M.E.s in many ways. Respectively organization has its personal classification and notion of small-medium businesses (SMEs).

The development and success of Pakistan's small enterprises impacted by a broadly acknowledged definition of a small firm. Pakistan's political and governmental authorities (S.M.E.'s) have not yet reached a consensus definition of small and medium-sized firms. A more standard definition that encompasses micro, small, medium, and big firms will be advantageous for small and medium-sized enterprises (S.M.E.'s) (M.S.M.E.'s).

People use social media to communicate and remain informed, but they also use it to change society and introduce new ideas and thoughts. Additionally, social media has developed into a significant tool for marketing and sales in the era of globalization. Social networking is a useful marketing tool today for reaching consumers and fostering confidence in online transactions.

Social media is currently. According to psychological studies, people's urge to shop online by virtual self-assurance. Because social media users are more likely to be tech-savvy and have experience with online shopping, they prefer to look up product information on specialized forums.

E-commerce and media platforms usage have a strong connection, as (Kwahk & Ge, 2012) found, and social media has several aspects as well. The rise of social media has produced a favorable environment for e-commerce because of its features. To make it simpler for customers to be reached and engage real-time. For newbies, it is a good idea for customers to utilize e-commerce platforms in order to make the best possible decisions (Zheng, Caldwell, et al. 2004).

Social networking sites like Facebook and Twitter allow clients to swap out and modify their own e-phrase of mouth. For e-commerce businesses, social site communications have the ability to influence customers and serve as a supplier of having towards customers (Baig & Bilal, 2018). E-word-of-mouth and live chat on e-commerce sites, combined with social media characteristics such as rating and suggestion, may have an influence on the purchase aim (Hajli, Shanmugam, et al., 2015) (McLean & Osei-Frimpong, 2017). E-retailers and public sales administrators are including social purchase tools on their sites due to the growing popularity of this practice.

Social purchasing networks are about "creating spaces where people can interact online, get recommendations from reliable people, find products and offers, and then buy them" (Schwartz & Rubel, 2005). The advice or tips of other shoppers about the products play a significant part or influence during social shopping. When customers read product recommendations on websites' social purchasing networks, their desire to buy the socially advised product is aroused, and they will do so from that site.

Additionally, people are more likely to believe the information provided by other customers than agency-issued information (Smith & Chaffey, 2008). As a result, websites may see an increase in income if users trust the ratings or suggestions of other customers. There is mounting evidence that e-commerce is strongly reliant on trust, with most consumers turning to reliable websites when they facilitate purchasing (Chen & Wang, 2016).

Social media, as a result, plays a significant role in deciding trust in e-commerce situations (Rohm & Milne, 1998). Many online enterprises face significant trust issues, especially in quickly developing foreign markets. Prior research suggests that social media characteristics have a major impact on net purchasing behavior and the adoption of e-commerce. The extent to which social media factors influence online purchase behavior and UT penetration has not been sufficiently explored in prior studies (Turban, Leidner, et al. 2007) (Bai, Yan et al. 2015) (Ahmed, Kader et al. 2017). E-commerce and social media has examined in certain studies (Turban, Leidner, et al. 2007, Bai, Yan et al. 2015) (Ahmed, Kader, et al. 2017). E-commerce in underdeveloped nations has received little attention, though. Social media trends link to how customers purchase online and utilize e-commerce in these regions.

In e-commerce, products and services may be purchased and sold online without ever setting foot in a store or retail location. Because of the convenience it provides, worldwide sales demand via various e-commerce platforms may see an increase on a regular basis. The research shows that in 2019, global e-commerce sales are expected to reach \$3.46 trillion in value. This figure is expected to climb in the coming years, demonstrating that doing business through the Internet is a viable alternative for most businesses (Digital Commerce 360, 2020).

Along with the increase in the global population, foreign purchases are rising in comparison to previous years. U t in Pakistan was introduced in 2001 and has since expanded rapidly to the point where it is now able to compete with and even surpass the physical buying industry on a worldwide level. Even though Pakistan has become a major player in the world of online shopping, this business world has been plagued by a slew of difficulties (Pro-Pakistani, 2019).

One of the key problems Pakistan's online business network has is the lack of knowledge about a more accessible purchase channel. The next generation is becoming illiterate, and many people are skeptical about online payment options. Ninety-five percent of online shoppers use Cash-on-Delivery because they do not trust online merchants because of this illiteracy. Due to the complexity of Pakistani banks' online charging procedures, these pricing options are occasionally the only option. The usage of their electronic payments for online purchases is prohibited by several other banks. Instead, the user must get in touch with the mortgage lender and request online access, which is only accessible after doing so for a little time (Pro Pakistani, 2018).

The lack of a proper logistical network is another challenge that Pakistani e-commerce faces. This discrepancy usually causes delivery workouts to be delayed, which leads to customer unhappiness and a subsequent rise in mistrust for e-commerce platforms therefore. An online shop is expensive to build and maintain, and inventory management adds to that expense, discouraging businesses from going online in the first place (Khan, Zubair et al., 2019). The government's promulgation of cyber regulations has made online services more secure and less susceptible to fraud.

The development of online payment methods by a variety of banks is a definite plus. Daraz, Kaymu, and other big online marketplaces with dedicated marketing and customer service programs have had a significant impact on the online target demographic. In addition, global and

local logistical partners, starting in Pakistan, help to support this phenomenon (Khaskheli & Jun 2016).

The growth of communications and information technologies has increased the advantages of trade. As information technology advances, businesses are becoming more familiar with computer and online commercial activity as a way to improve the market shape, save operating costs, or better connect with clients. Clients and services may both benefit from the positive effects of technology (Waseem, Rashid, et al., 2018).

E-commerce may be advantageous for SMEs in terms of market penetration and monetary rewards. Many large markets require SMEs to fulfill a few prerequisites before they may enter, such as money, a variety of products, a brand name, or stock. Due to digital technology, small and medium-sized firms (SMEs) can more easily enter certain industries. By conducting business online and digitally, small and medium-sized businesses (S.M.E.) might potentially save money (Di Fatta, Patton et al., 2018) (Waseem, Rashid, et al., 2018). (Susanty, Handoko et al. 2020) define e-commerce as the manufacture, promotion, and distribution of things that may be purchased over the Internet but are presented in a tangible manner. The Internet is used for the transportation of goods as well as the dissemination of data. Additionally, (Dahbi & Benmoussa, 2019) investigated the characteristics that motivate SMEs to engage in internet commerce (E-commerce). Small and medium-sized enterprises will be prevented from adopting e-commerce for a number of reasons, including those relating to technology, finances, culture, and the organization itself.

The socioeconomic system is deeply and significantly impacted by improved e-commerce. After a protracted era of development and universalization, e-commerce has recently entered a phase of rapid development. The Vietnam E-commerce Association forecasted that the surge in e-

commerce in 2017 would continue through 2018–2020 with a 25 percent growth rate. When it comes to doing business online, e-commerce applies to the use of computational methods and techniques to facilitate the sale, purchase, transfer, or exchange of goods, services, and/or information. Product or service delivery might take either on or off the Internet. (Choi, Stahl et al. 1997).

The literature indicates that it is not as easy as it seems, but it is a viable option for both large enterprises and small businesses, and so it symmetrizes their resistance (Grandon & Pearson, 2004). There is a willingness on the part of organizations to use the Internet and transmit large facts in order to gain entrance for consumers and attract a greater market reach through a digital platform (Chuang, Nakatani, et al. 2007).

It has become more important for companies to function across both online and offline structures in order to maintain their competitive edge. In the wake of the rise of internet shopping, the actual act of shopping has been severely impacted (Moll & Yigitbasioglu, 2019). Because of this, consumers' well-known habits have changed over time in favor of online purchase structures across the world (Khan, Xu et al. 2016).

The Business-to-Consumer (B2C) end of the e-commerce spectrum has been the focus of the majority of recent E.C.E.C. studies (Adham & Ahmad, 2005). The price of residential Internet access has significantly increased during the last few years. Between 2000 and 2009, the country's net penetration climbed by an average of 356.8% annually. The Business-to-Consumer (B2C) end of the e-commerce spectrum has been the focus of the majority of recent E.C.E.C. studies (Adham & Ahmad, 2005). The price of residential Internet access has significantly increased during the last few years. Between 2000 and 2009, the country's net penetration climbed by an average of

356.8% annually. (Internetworldstats.Com 2010) Moreover, in 2009, the overall number of Internet users was 65.7%, resulting in 16,902,600 total Internet users. Businesses throughout the globe are increasingly turning to commercial enterprise e-commerce because of the industry's improved capacity to do business online.

E-commerce, according to (Teo & Ranganathan, 2004), has a much greater incentive for corporations than for consumers to adopt it because it offers many advantages to corporations, including huge savings in transaction fees and increased efficiency as well as strategic flexibility through the development of more flexible and responsive relationships with important business partners. Researchers in e-commerce revealed a stunning increase in global e-commerce owing to the enormous number of products and services transacted between companies (Traver & Laudon, 2001). E-commerce, according to (Teo & Ranganathan, 2004), offers many benefits to corporations, including significant savings on transaction fees, increased efficiency, and strategic flexibility due to the development of more adaptable and responsive relationships with significant business partners. This is why corporations have a much greater incentive to adopt e-commerce than consumers do. Because so many goods and services are exchanged between businesses, e-commerce researchers found a startling rise in worldwide e-commerce (Traver & Laudon, 2001).

I.D.C. estimates that this year, more than 624 million Internet users worldwide would spend a combined \$8 billion on goods and services (both enterprise to commercial enterprise and enterprise to consumer). By 2013, the value of global e-commerce transactions could exceed \$16 trillion. (I.D.C. 2010). S.M.E.s in developed nations have begun integrating e-commerce into their operations, but S.M.E.s in developing nations are still hesitant to use data technology or the Internet in their regular company operations. According to S.M.I. statistics, just 30% of Smg (Small and Medium Sized Industries) companies have a website and regularly use I.T.I.T. (Hussin

& Noor, 2005). There are a number of factors that could affect how small and medium-sized enterprises utilize e-commerce.

Furthermore, by more accurately analyzing the factors that affect e-commerce adoption, managers of small and medium-sized firms may be able to predict the future expansion of e-commerce. The majority of studies concentrated on the adoption of e-commerce globally. However, it is necessary to look more deeply at the adoption rates of e-trade in various countries. However, there is a substantial gap in research between developed and developing countries, which may vary widely across nations (Licker & Motts, 2000), which restricts the usefulness of research findings from wealthy nations in improving our understanding of a condition (Dewan & Kraemer, 2000). (Stiglitz 1988) and (Shore, 1998) claims that record-keeping system implementation is dependent on a wide range of factors that can vary widely from country to country. These factors include social, cultural, financial, legal, and political contexts, among others. According to (Dewan & Kraemer, 2000), the results of industrialized countries are no longer instantly applicable to emerging countries. Thus, this research was necessary to ensure that results from studies in rich countries could not be applied to developing countries and to expand our understanding of the factors that lead to e-commerce adoption in these countries.

Since then, a novel framework for enhancing global competitiveness and encouraging firm growth, E.C.E.C., may be taken into account (2020). Furthermore, it may help Companies Bridge the gap with customers, saving time and money and therefore increasing profitability (Saridakis, Idris, et al. 2019).

Since virtual platforms provide exceptional prospects, lower fixed prices, greater competitive benefits, wider product placement, and extended potential markets, E.C.E.C. has become a more widespread market for companies (Lefebvre, Lefebvre, et al. 2005).

According to the literature, S.M.E. is progressive and enterprising, with a strong feeling of survival (De Massis, Audretsch, et al. 2018). Although they have a high-chance aversion and limited access to financial resources, they have also been linked to lower levels of E.C.E.C. adoption (Grandon & Pearson, 2004). Small and medium-sized businesses (S.M.E.s) may have difficulty adopting the E.C.E.C. because of internal and external issues.

The term "e-Awareness" has been coined in the literature to describe a lack of awareness, knowledge, comprehension, or act skills among shareholders and superiors closer to technology implementation (Zhu, 2004). According to Chuang et al. study. 's from 2007, there is an unmistakable correlation between the owners'/managers' level of managing expertise and the adoption of E.C.E.C. As a result, it is anticipated that businesses with more technological expertise may embrace the E.C.E.C. at a higher rate (Chuang, Nakatani, et al. 2007). On the other hand, in order to effectively keep up with it, managers and owners (Wojtkowski & Hardesty, 2001) need to be educated about new technologies and the industry within the employer.

The second is the deployment of new technology, which may be an expensive process for small and medium-sized businesses (SMEs) with limited resources (Scupola, 2009). A person's capacity to use new technologies in their e-commerce ventures depends heavily on their ability to access appropriate resources (Abebe, 2014). Often, they are unable to make investments in the early stages of the company since it has a negative influence on E.C.E.C. uptake and attentiveness (Van Akkeren & Harker, 2003).

Many academics have long considered small and medium-sized enterprises' lack of technology preparedness to be a major impediment to E.C.E.C. adoption (2011). (Tan, Tyler, et al. 2007) found that the majority of S.M.E.'s' challenges with E.C.E.C. adoption stem from a lack of technical preparedness and a misallocation of personnel and capital resources. Another common problem for these companies is a lack of technical knowledge. It is also necessary to have human capital with a background in period adoption in order to investigate this alternative (Simmons, Armstrong, et al. 2008). Furthermore, poor human and financial resources, making them less able to adapt to organizational changes (Mustafa, Nakov, et al. 2019), often characterize small and medium-sized enterprises (SMEs).

S.M.E. must make the transition from traditional trading venues to virtual ones (V. Y. L. T.) to succeed. It is because of the global aspect of the digital world that the resistance is fiercer and more aggressive than in a more conventional setting (Simmons, Armstrong, et al. 2008). Consequently, small and medium-sized firms may be forced to accept their online presence since they are unwilling to take on this duty (Abou-Shouk, Lim, et al. 2016). When it comes to external elements, one of the most important ones is the competitive market (Abou-Shouk, Lim, et al. 2016), which, given its importance, ought to lead to coverage policies and laws that take into account S.M.E.'s' unique characteristics. (Zheng, Caldwell, et al. 2004) asserts that service metrics may have a substantial impact on small and medium-sized firms. Making the shift is a process that occurs in S.M.E.s because of the lowest levels of acceptance and appreciation of E.C.E.C. To succeed in the end, businesses must be able to innovate and adjust to ongoing market volatility (Golovko & Valentini, 2011). Small and medium-sized firms (S.M.E.'s) typically plan more strategically than their larger competitors, which increases their (Thompson, Williams, et al. 2013) adoption of E.C.E.C.

According to the author, it was discovered that risky restrictions raise operating costs, decreasing the likelihood that these businesses will move closer to digital environments. Trust is also viewed as being essential in E.C.E.C. (Bock, Lee, et al. 2012). Businesses and consumers might also be pushed out of virtual environments if it is absent (Lin, Wang, and et al. 2019). Customers are far less likely to participate in online commerce if they are concerned about security and confidence in the transaction, as the literature confirms (Costa & Castro, 2021).

In S.M.E.'s, the acceptance and enjoyment of E.C.E.C. at the lowest levels lead to a process known as "making the shift." Businesses must be able to innovate and adapt to continual market turbulence in order to achieve long-term success (Golovko & Valentini, 2011). Small and medium-sized businesses (SMEs) are often more forward-thinking than their larger counterparts, which gives them a longer lifespan (Thompson, Williams, et al. 2013).

In spite of this, many firms are attempting to survive the innovation process (Story 2016). On the subject of small and medium-sized firms (S.M.E.'s) and the digital transition they have made to the European Community, a substantial corpus of literature has evolved in recent decades (E.C.E.C.). However, these businesses are far from homogenous and therefore present a significant challenge for students in terms of addressing their techniques and anticipating hit paths as well as correct coverage mo.

A closer relationship between the customer and the company is made possible by technology, allowing for better supply chains, lower fees, and more mobility. Virtual technologies have brought about a paradigm change in global markets in recent years, placing businesses, sectors, and consumers in new and unexpected contexts. Therefore, organizations must modify their strategy to fit the demands of virtual markets in order to remain competitive (Bilgihan, A.;

Kandampully, J.; Zhang, 2016). In light of the current context, it appears that this advancement is a crucial detail for S.M.E. resilience and survival in the future. At the same time, some research views the adoption of electronic platforms as a part of innovation techniques. In this new era of economic upheaval, consumers who previously had little experience with online shopping are becoming more comfortable with it, leading to the emergence of new group trends that reflect the increasing influence of virtual structures among consumers. The COVID-19 epidemic has sparked usage on a regular basis among customers and businesses, resulting in a slow shift away from conventional business practices in the year 2020. E-commerce retail sales will surpass 4.2 trillion U.S.U.S. dollars in 2020, an increase of more than 25% from 2019. Consumers are turning more and more to their mobile devices to fulfill daily needs, which is causing a slow shift away from traditional corporate structures. More than 4.2 trillion U.S.U.S. dollars in e-commerce retail sales are expected to be sold over the globe in 2020, according to Statista's most recent findings (Coppola, Lauritano, et al. 2021). More than ever, shoppers depend on their mobile devices to complete their purchases. The emergence of recent innovative company models and the increase in the delivery date, which is predicated on delivering items in under an hour, have been extensively linked to this evolution and shift in consumer behavior.

Marketline cites data from the World Economic Forum. Agile methods for Public- and Private-Sector Players in Transition: The Future over the (Previous Ecosystem, 2020). Faster delivery techniques have been attributed to the second wave of O p, the fast trade (hereafter q-trade). With customers' increasing need for more rapid and convenient business methods, the emergence of q-trade has the potential to challenge conventional company structures. UBER + G.L.O.V.O. are benefiting from this move toward fast-moving customer demand by using their business strategy.

Therefore, we suggest that small and medium-sized businesses (SMEs) must overcome historical obstacles in order to recognize the advantages of era implementation and adoption. Its purpose is to examine the state of the art of literature demonstrating S.M.E. managers' and owners' pursuits. On the other hand, based on the evidence of previous studies, talk about the merits and demerits of adopting it.

As a result, this transformation will provide competitive advantages and allow them to live adaptably, creating a hatch enabling their survival in the virtual world. This article concludes by offering some advice on how to better use internet markets (and, extra specifically, E.C.E.C.). Eventually, it will become clear that managerial knowledge and technology preparedness, as well as financial battles and commercial company settings, are critical factors of the virtual shift among these firms, which the average citizen government may promote.

Small and medium-sized enterprises (SMEs) act as growth areas for an economy (Khaskheli & Jun, 2016). About 80% of the global monetary growth has come from small and medium-sized enterprises (Dawn) (2002). It is a shame that despite the importance of E-Commerce and small businesses, there has not been a single accepted definition for the two terms.

They are described in different ways (2008). S.M.E.s are businesses with less than 250 full-time workers. Parliament of the E.U.E.U. (2000). E-commerce has been shown to be beneficial to organizations of all sizes, according to studies.

Pakistan's Malaysian Industrial Development Authority (S.M.E.D.A.), which was established in 1998, has been the main government body for developing strategies to advance S.M.E. Small and medium-sized enterprises (S.M.E.'s) are defined by S.M.E.D.A. as having less than 500 full-time

employees, annual turnover of less than PKR 250 million (\$2.5 million), and paid-up capital of less than PKR 100 million (USD 0.25 Million approx.).

SMEDA/IIN eServices provides a range of E-Advertising choices for small businesses that are connected to numerous virtual technologies. Google Adwords (S.E.M.) and Keyword Research (SEO) in combination with displaying ads and digital world 2.0 tactics (www.Smeda.Org.Pk). As e-commerce websites focus on user-generated content, Web 2.0 technologies are increasingly being used. This allows users to interact with each other in the same way as social media.

Additionally, customers may share their shopping experiences with others and offer comments on the goods and services available on the e-commerce platform. Small firms in Pakistan are mostly geared toward creating goods for export. Small and medium-sized businesses (S.M.E.) generate 30% of all export revenue (www.Smeda.Org.Pk). The S.M.E. sector has a huge impact on employment and poverty reduction as a key contributor to Pakistan's economy. In Pakistan, S.M.E. accounts for the vast majority of businesses, and there are reportedly two million S.M.B. devices operating there (www.Smeda.Org.Pk).

Small and medium-sized firms (SMEs) are responsible for 25% of exports, 70% of employment outside of agriculture, and 40% of Pakistan's G.D.P., according to the country's Economic Survey. Between 2003 and 2013, global exports rose at a rate of 14% per year, whereas Pakistan's exports grew at a rate of 11% per year over that same time. Pakistan, on the other hand, had a gain in exports of more than three times the rate of growth of its neighboring countries. Exports from India and China both increased by 39% and 37%, respectively. One of the reasons is that they have a well-established E-Commerce platform.

Research global's predictions of a substantial rise in online purchases may be used to measure the e-commerce boom (Beckers et al., 2018). Projected growth may be directly linked to growth that occurs as a result of innovation. The use of strategically placed mirrors at shops, for example, allows customers to better see the potential benefits of further purchases. In order for e-commerce to take off, these kinds of technological breakthroughs are essential.

Still, a variety of tools are being used to enhance the worldwide reach of online shopping and selling. E-commerce applications such as targeted advertising and return-on-investment monitoring through analytical tools may be achieved via the use of social networks that house the majority of the world's population (Hua, Cobcroft, et al. 2019).

One-way firms may benefit from e-commerce development by implementing standard sales procedures in a more efficient manner. E-commerce and the Internet make it easier for consumers to make purchases, which leads to an increase in sales. On the other side, Yu et al. (2020) argued that e-commerce helps companies grow by allowing them to target clients in a wide range of locales.

Additionally, e-commerce tools and services may save operating costs and enhance supplier cooperation, which is generally advantageous for customers. Businesses must utilize the benefits of e-commerce centers due to increased competition in the commercial sector.

(Hanna, Marchal, et al. 2016) argues that the extent to which businesses benefit from e-commerce depends on the availability of the right infrastructure. Furthermore, having access to money is essential because it enables one to methodically carry out all of the processes and deal with any special disruptions that may occur throughout the deployment of e-commerce.

Online sales of goods and services, virtual orders for on-the-spot delivery, electronic money transfers, online trades in inventory, electronic bills of lading, commercial company plans, direct advertising, and after-profit deals are just a few of the unique activities that make up e-commerce. E-commerce refers to Internet-based processes that carry out the monetary exchange, products, services, and statistics shipment with the goal of exchanging all movements of companies and individuals in a completely electronic environment.

(Turban, Leidner et al. 2007) Identified e-commerce and its programs as one of the observers on the subject. There are initiatives for direct marketing, activity search, online banking, mobile commercial business (e-commerce), merchants, and e-government that show Turban's vision of e-commerce is expanding. Besides technological principles, norms, and standards, Turban also took into account commercial company partners in the e-exchange markets and support services, as well as advertising and government tax restrictions.

B2C (Business-to-Consumer) e-commerce is defined by Messaging & Whinston 1997 as purchasing, selling, or promoting items and services using laptop networks. This generation's adoption has been extensively studied in terms of the characteristics that influence recall.

Also, several full-size, both internal and outside influencing cases have been described in various e-commerce study studies (Mohamad & Ismail, 2009). These include a propensity to tolerate external demands and a perceived ease of use. E-commerce also serves as a data distribution, business intelligence, as well as transaction and collaboration function, according to (Mohamad & Ismail, 2009)

Acceptance of e-commerce improves performance in internal strategies and the supply chain for products. Small businesses, on the other hand, confront a lack of resources when faced with high-

demand conditions, as compared to their bigger counterparts. It is, therefore, logical to assume that internet business will help to discover and broaden a wider customer base, as well as to overcome international competition by increasing global visibility and attracting new clients from distinct geographical regions. In addition, the needs of prospective customers are better recognized and served via the use of the Internet in business.

E-commerce's vital fulfillment aspects include cost addition, niche identity, expansion, flexible preservation as well as regional segmentation, high-quality service, connection introduction, and internet tradition comprehension. As a follow-up, I evaluated the impact of internal and external organizational elements on S.M.E. networking and discovered strategies to enable self-performance through technology connected to advertising, marketing, and perceived resistance.

Because of its benefit to both customers and businesses, net entrepreneurship has become commonplace. These benefits include the ability to charge customers, a wide range of product options and prices, the convenience of the customer, and access to statistical data. As a result of using the new technology, many companies have seen an increase in their overall performance thanks to more efficient management.

According to several studies (Bock, Lee, et al. 2012), e-commerce drastically cuts transaction costs for both the buyer and the seller. Refers to corporate management concepts such as creativity, initiative, and the willingness to take calculated risks or the ability to recognize and seize new opportunities in the macroeconomic environment.

One-of-a-kind perspectives may, in reality, characterize the e-trade. Using laptop networks or other electronic devices such as a mobile smartphone or a T.V.T.V. to send products, offers, and recordings is what this signifies in today's communications era. Iran is a newbie in the field of e-

commerce, and there is still a long way to go before this country reaches its full potential. The new generation in this area handles the new requirements for processing and transferring information, devices, and necessary infrastructures to accomplish.

The U.T.A.U.T. developed incorporates eight different models of I.T.I.T. adoption. With regard to time and user behavior, the U.T.A.U.T. takes into account four primary constructs: overall performance expectation (including social effect), effort expectancy (including time commitment), as well as enabling circumstances (including the availability of resources). Even as enabling circumstances to impact how much time is spent, U.T.A.U.T. says that targets and effort expectations are critical motivators for the behavioral goal of making efficient use of available resources.

To begin, this study asks: Why, in comparison to industrialized nations, is conducting business online with such a low penetration rate? Does E-commerce adoption have the same effect on the performance of brick-and-mortar and pure players? If you're going to study e-commerce, you need to separate it from traditional business models (Azam & Quaddus, 2009).

S.M.E.'s success is now believed to be influenced by three factors: the expectation of effort, the expectation of performance, and government facilitation of the business environment. Data from companies currently using e-commerce will be used to gather information on the effects of these three key factors. These determinants will be used to construct hypotheses, which will be put to the test to confirm the existence of any relationships.

2.1. PERFORMANCE EXPECTANCY (PE)

Performance expectation can be described as "the degree to which the user anticipates that the employment of the gadget would aid him or her in attaining advances in the process's overall

performance." (Brown, Venkatesh, et al. 2014) In other words, if individuals think new technology will make their jobs easier, they are more likely to adopt it.

Venkatesh et al. incorporated five elements from various models, such as relative advantage, extrinsic motivation, practice, relative benefit, and result expectations, to create the overall performance expectancy construct (2003). The concept of perceived utility was introduced into the Technology Acceptance Model and modified for their C-TAM-TPB.

According to Venkatesh et al., "the degree to which a character feels that the utilization of the gadget would enable someone to acquire profits in activity performance" (2003). Performance expectations have developed into a strong predictor of behavioral intent, according to earlier studies (Brown, Venkatesh, et al. 2014).

This concept, which is similar to "performance expectation," refers to a person's conviction that putting a system into place will probably increase his or her overall performance at work. When someone is driven to accomplish something because of something outside of themselves, this is referred to as extrinsic motivation. Additional forms of motivation include salary, grades, or promotions, in addition to rewards and punishment. A third concept, "job fit," may be established by an individual's conviction that utilizing a method or technology would increase process performance (Teo & Ranganathan, 2004).

The degree to which a person thinks a new technology is superior to an earlier one is another approach to explaining the concept of relative gain (Orr, 2003). The idea of result expectation was introduced by Bandura in his Social Cognitive Theory (Bandura, 1986). This idea has divisions for production (or activity-related) and subjective outcome expectations (e.g. sense of accomplishment and self-esteem). Numerous investigations have shown similarities between these

two ideas (Kulviwat, Bruner II et al. 2007). According to prior studies, predicted performance has a positive impact on actual usage behavior (Shahzad, Chin, et al. 2020)

By fusing technology and markets, as well as subnetworks and national innovation frameworks, outside of a company's own borders, open innovation has created a firm's value (Yun, Zhao, et al. 2020). As a result, organizations can use data to explore new possibilities thanks to open innovation dynamic capabilities. E-commerce can be a vehicle for innovative openness in this way, which improves the performance of small and medium-sized businesses.

In the literature, using e-commerce is considered a technique to communicate with other business partners, which enhances the organization's overall performance (Kraemer, Gibbs, et al. 2005). Additionally, this approach enables clients to communicate with the seller on a local, regional, and global level. Additionally, it has been discovered that the use of e-commerce has had an impact on a variety of business operations; it has altered not only the ways in which patronizing, purchasing and customary business conversations have changed but has also changed an organization's attitude from "manufacturing excellence" to "customer intimacy." The introduction of electronic commerce in developing countries is lagging behind, despite the fact that the government has shown a great deal of interest. E-commerce has a significant influence on overall operational performance, as well as (Sila, 2015); e-commerce use does not have an immediate impact on operational performance when it is used. Instead, it focuses on increasing the efficiency of commercial operations first before moving on to operational efficiency gains. As a result, e-commerce is being seen as a mediator inside the framework to assist Pakistan's SME sector in the current day.

Other than this, in order to improve SME performance in general and encourage them to better analyze their companies' shortcomings and implement new strategies for resolving current problems and maximizing revenue, market share, monetary function, and long-term viability, all elements were thoroughly researched using previous literature.

Technological innovation is essential in today's digital age if you want to succeed in a competitive market. Additionally, the introduction of new technologies like e-commerce is reshaping the world of business (Sunayana & Parveen, 2019). As a result, business operations are becoming more efficient and competitive in the virtual world. E-commerce has also been shown to have a positive impact on the performance of small and medium-sized businesses (SMEs) by enhancing their business processes (Sanjaya, Maryanti, et al. 2018). Similarly, e-business has a favorable impact on overall performance.

All of the foregoing evidence suggests that the adoption of E-commerce greatly enhances the business's performance. There's no doubt that e-commerce is beneficial for companies to utilize. It boosts sales and reduces the company's reliance on a single location. There is also an advantage to the firm as a result of the reduced transaction time. In other words, how big of an impact e-commerce is expected to have on the bottom line depends on the E-commerce operator.

E-commerce has been shown to benefit small and medium-sized businesses in the past (Shahzad, Chin, et al. 2020). It has been shown that small businesses that have embraced e-commerce are doing better than those that did not. It is possible to think about SME performance in terms of long-term corporate objectives being met with efficiency, effectiveness, and economy by the SME operators. As a result, we may formulate a hypothesis that reads as follows:

- **H1: Performance expectancy has an influence on the use of e-commerce.**

2.2. EFFORT EXPECTANCY

According to the dictionary, effort expectancy may be summed up as: "the degree to which utilization of the system is easy. A person's desire to adopt a new generation may be figured out with the assistance of latent variables connected with attempt expectancy that have grown enormous (Zhou, 2012). There are three elements from various models that are included in the idea of overall effort expectancy by Venkatesh et al.

As part of the Innovation Diffusion Theory, performance expectancy of use is a notion that relates to the idea that people think the usage of the modern age is simple. Effort expectation also includes the concept of difficulty(Thompson, Higgins, et al. 1991). In this edition, the term "complexity" refers to the difficulty of using a device as experienced by its users. There are just a few differences between the definition of ease of use and the definition of complexity. Complexity refers to the whole system, whereas usability refers to the individual invention (Brown, Venkatesh, et al. 2014). It has been shown that these views are comparable to those of others, such as (Thompson, Higgins, et al. 1991)

The advantages of t s are also regarded as a need for businesses to adopt the e-commerce model. In addition, the more businesses that are aware of the advantages of e-commerce, the easier it will be for them to get an e-commerce version throughout their process.

(Susanty, Handoko et al. 2020) The claim is that owing to e-commerce benefits, businesses will be better placed in terms of time, money, and human resources in the manufacturing and business system. The awareness of e-commerce advantages contains references to the degree of hotness of the possible advantages that the op generation could even offer for the enterprise; the awareness of e-commerce compatibility refers to the degree of compatibility between the e-commerce generation and the enterprise's current systems.

The inquiry arises as to whether or not a business's expectations of effort impact its internet presence. Previous research shows that the expectation of effort has a substantial positive influence on the actual usage behavior of the product. (Bock, Lee, et al. 2012) According to this research, E-commerce tools are simple to use, quick to learn and take up little time in the transaction process. As a result, our initial hypothesis may be summarized as follows:

- **H2: Effort expectancy has an influence on the use of e-commerce.**

2.3. FACILITATING CONDITION

According to prior studies, enabling conditions have a significant impact on actual use behavior (Shahzad, Chin, et al. 2020). Conditions favoring the use of new technologies are getting close to the level of support that is readily available (Brown, Venkatesh, et al. 2014).

SMEs will adopt e-commerce if they have enough resources and expertise, access to government resources, outstanding assistance from net-store service companies, direction from market operators, and access to specialist market instructors' support. When it comes to how small and medium-sized businesses (SMEs) use e-commerce, an enabling scenario has been defined as how they perceive the available technological infrastructure and organizational centers.

When it comes to encouraging SMEs to use E-commerce, the next question is how much of a supportive atmosphere is there. As long as they have the resources, competence, a decent CRM from their service provider, and the aid of specialized people in their field, SMEs will embrace this method of operation. According to recent research, it has been shown that the enabling state has an impact on actual usage (Shahzad, Chin et al. 2020). The hypothesis developed in the following manner:

- **H3: Facilitating Condition influences the use of e-commerce.**

THEORETICAL FRAMEWORK

INDEPENDENT VARIABLES

(MEDIATOR)

DEPENDENT VARIABLE

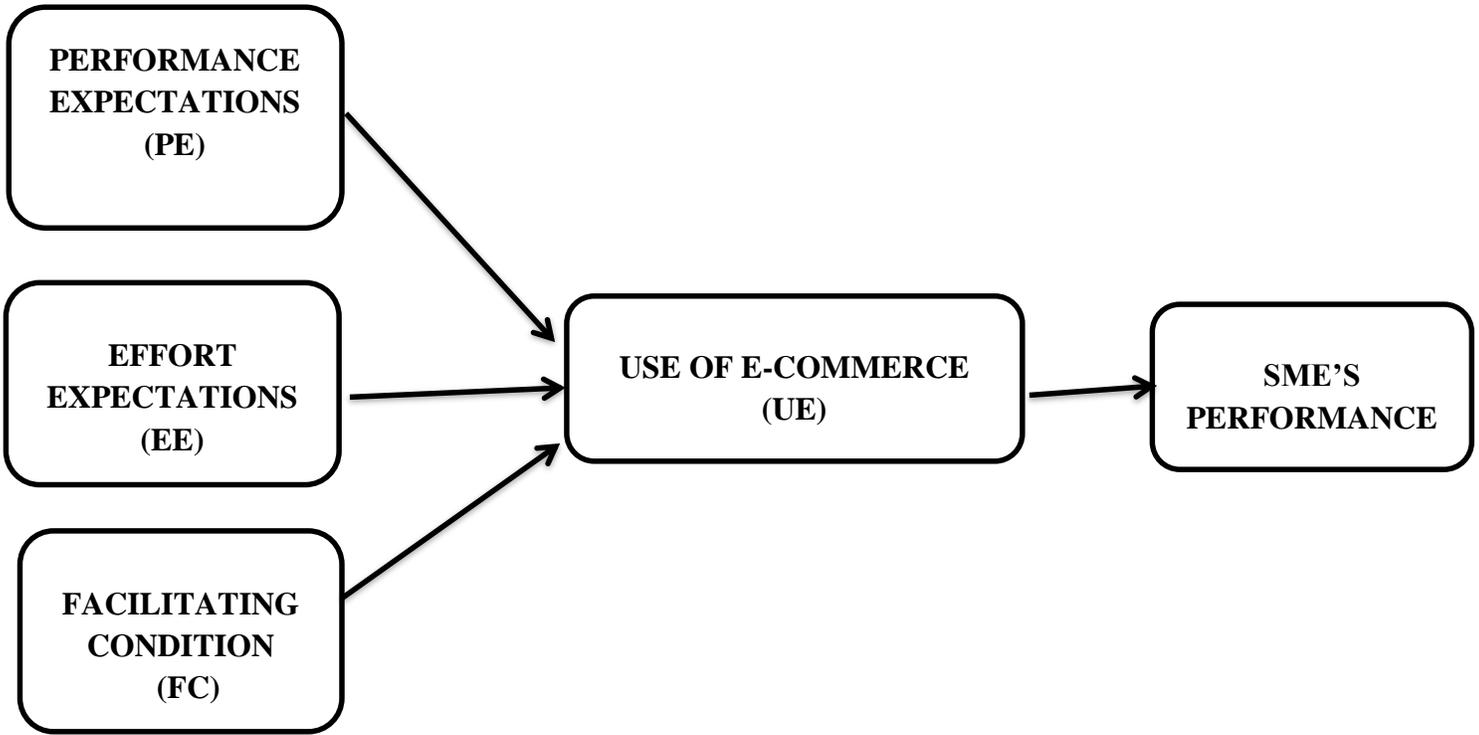


Fig: 1.1 Depicts the theoretical framework of the study

Performance expectancy has an influence on the use of e-commerce
Effort expectancy has an influence on the use of e-commerce
Facilitating Condition influences the use of e-commerce.

CHAPTER 3

METHODOLOGY

3.1 CHAPTER METHODOLOGY

3.2 STUDY BACKGROUND

In practice, a discussion is held with the participants in order to complete the questionnaire through an on-line questionnaire. The questionnaire developed by using previous studies question items and modified according to my research study. All of them were certain of their replies, so they were able to express themselves fully.

3.3 DATA COLLECTION PROCESS

3.3.1 SAMPLING METHODOLOGY

To develop the questionnaire, focus is on reliability and effectiveness of impacts on objectives of this study. By adapting, the other research works that has been done before and using 5 Likert and amend the items with my research study. The questionnaire data collected via online google form by checking the digital authenticity of the study.

The objectives are performance, which has influence on the use of e-commerce, effort expectancy has an influence on the use of e-commerce and facilitating condition influences the use of e-commerce. The literature of this study has conduct by many researches, theories and previous studies to develop the questionnaire and targeted group

Define the research objectives: Clearly articulate the purpose and objectives of your study. What specific information are you seeking to gather from the respondents? This will guide the development of your questionnaire. The questions are clear, concise, and relevant with the research objectives. In addition, the study using established scales or validated instruments for questionnaire.

To organize and structure the questionnaire by arranging the questions in a logical manner and using different question types (e.g., multiple-choice, 5-Likert scale, close-ended) to gather a variety of data. Group related questions and include clear instructions or prompts to guide respondents through the questionnaire.

Sample size: Determine an appropriate sample size based on statistical considerations. This study involves considering factors such as the desired level of precision, the variability of the data, the expected effect size, and the statistical tests the plan to employ. Statistical power analysis helps me to estimate the required sample size to detect meaningful effects or relationships.

The sampling methodology is mainly collected by the targeted population which is E-commerce digital platform named as daraz.pk. The method is adopted to collect data is simple random sampling technique, it helps for me to collect data from online platform through google form mechanism.

Sample Size: The sample size of this study is about 100

3.3.2. PROCEDURE

Survey research is the data-gathering method employed in this quantitative study. To test the hypothesis, a small group was given a list of pre-written questions. An online poll was utilized to test hypotheses in the context of the worldwide epidemic.

3.3.3. ANALYSIS TOOLS

SPSS version 25 were used to analyze and report on the data gathered.

3.4 POPULATION

E-commerce vendors from both pure e-retail and click-and-mortar enterprises are included in the participants. Daraz.pk, goto.pk, and symbios.pk provided the information used in this report. Participants' work was entirely self-directed and unpaid.

3.5 EMPIRICAL ANALYSIS

The goal of this research is to examine the challenges faced by Pakistan's E-Commerce industry. E-Commerce policy (2019) has just been issued by the government, which provides precise rules for doing business. As a result, the economy suffers from a large loss of employment and business opportunities because of this industry's slower-than-average development. The reasons why the literature is where it is and how it may be improved are also discussed in this research using relevant literature, and then recommendations are made.

This research is based on a quantitative study approach to analyze the best result of this research. Results show in the results section with empirical results. Data were collected using a simple random sampling technique from multiple online retailers. We handed out 350 questionnaires; there were a total of 200 samples from multiple retailers. And we were able to employ 200 of them. Online surveys were used to gather the data. The technique used simple random sampling.

To describe the approach and analyze the main research problem, researchers employ a variety of techniques and strategies. A crucial element of any study that examines something is the research approach (Krauss, 2005). According to Syam and coworkers (the target market) and the presentations (the researcher), each might provide critical evaluations of the reliability and validity of the studies (Hancock, Ockleford, et al. 2001). This section contains brief explanations of the state-of-the-art tools and techniques used in research to meet study goals. Following a brief introduction, the current chapter concentrates on the study's research methods. The method for gathering data, the population, empirical analysis, measurements for the study variables, sample demographics, and reliability for each item are all covered in depth.

3.6 MEASURES

(Brown, Venkatesh et al. 2014) Used four questions each to assess the performance expectation, effort expectancy, facilitating condition, and usage of e-commerce (Brown, Venkatesh, et al. 2014). From "strongly" (1) to "strongly agree," the items in the survey employed a seven-point Rating scale (5). For this reason, we wanted to find out what factors influence Pakistani SME growth and e-commerce adoption

3.7 CHARACTERISTICS OF DATA COLLECTION

Table. 3.7.1 Sample Demographics

		Count	Percentage
Gender	Male	81	81.0
	Female	19	19.0
Marital Status	Married	57	57.0
	Unmarried	43	43.0
Education	Bachelors & Below	63	63.0
	Masters & Above	37	37.0

Both sexes were represented in the study (male & female) Men accounted for 81.0% of survey participants, while women made up the remaining 19.0%. Only those who were at least 22 at the time of the poll were eligible for participation. 57% of those polled were married, compared to 43% who were single. Graduates comprised 63% of the respondents, while postgraduates comprised 37%.

Table 2. Reliabilities

Variables	Number of items	Items Reliability
Performance Expectancy	5	0.91
Effort Expectancy	5	0.91
Facilitating Condition	5	0.92
Use of E-Commerce	5	0.92

In the above table 2, there are results shown of the reliability test, which was performed separately for each variable. The variables performance expectancy, effort expectancy, facilitating, and use of E-commerce have multiple numbers of items. Five items are selected as performance expectancy, five items are selected as effort expectancy, five items are selected as facilitating condition, and five items are selected as use of E-commerce with reliability test of items are 0.91, 0.91, 0.92 and 0.92, respectively.

CHAPTER 4

RESULTS

4.1 Descriptive Statistics

SPSS 21.0 software was used for spearman rank correlation analyses. For example, the variance and standard deviation of a sample are described in descriptive statistics. Table 4 displays the descriptive data, such as means and standard deviations. For independent variables known as activity expectancy and effort expectancy, the mean and standard deviation is 1.51, 5.5 for completely reliant variables known as facilitating conditions, and 5.6 for the outcome known as e-commerce use. For the independent variables, the mean and standard deviation are 1.51 and 1.51. Indicator 4 of the data. In all variables, the mean and standard deviation are computed.

		Mean	SD
1	PE	5.19	1.51
2	EE	5.51	1.42
3	FC	5.62	1.30
4	UE	5.67	1.32

Note: PE=Performance Expectancy, EE=Effort Expectancy, FC= Facilitating Condition, UE=Use of E-Commerce.

4.2 Bi-Variate Correlation Analysis

As expected, the hypotheses' bivariate connections were strongly associated with each other. At a p-value of 0.00, any correlations greater than or equal to Ten were considered significant (2-tailed). In terms of performance expectations, the facilitating condition ($r=.388$, $p.000$) and the use of electronic commerce are significantly linked ($r=.206$, $p.000$), while the expectation of effort is significantly linked to performance expectations at ($r=.363$, $p.000$), the facilitating condition ($r=.445$, $p.000$), and the use of electronic commerce at ($r=.229$, $p.000$). At ($r=.468$, $p.000$), the usage of e-commerce is connected with the facilitation condition. Table 5 contains all of the findings.

All hypotheses are supported since the correlation matrix demonstrates a substantial association between the various variables. When two variables have a positive correlation, Pearson values indicate how strong the linear link is between the two variables.

Table 5. Mean, Standard Deviation, Correlation and Cronbach α Reliabilities of all the variables

		1	2	3	4
1	PE	(.91)			
2	EE	.462**	(.91)		
3	FC	.245**	.388**	(.92)	
4	UE	.306**	.229**	.468**	(.92)

NOTE:PE=Performance Expectancy, EE=Effort Expectancy, FC= Facilitating Condition, UE=Use of E-Commerce.

** Correlation is significant at the 0.01 level

N=200.

4.3 REGRESSION ANALYSIS

The R and R² values are shown in Table 6. The multiple correlation coefficient, R, has a value of 0.881, which shows a strong connection between the two variables in question. As shown by the R² value, which is 0.769, how much of the dependent variable's variance can be accounted for by the explanatory variables.

Table 6 Model Summary of Multiple Regression

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df 1	df 2	Sig. Change	F
1	.881 ^a	.776	.769	.63811	.776	111.077	3	96	.000	
Predictors: (Constant), MEANFC, MEANPE, MEANEE										

Analyzing the ANOVA table, we can see how well the r square matches the data. Here, we can see that the regression model accurately predicts the dependent variable, with a p-value less than or equal to 0.000, which shows that the data are well-fitting and the model as a whole accurately reflects the outcome variable.

Table 7 ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	135.687	3	45.229	111.077	.000 ^b
	Residual	39.090	96	.407		
	Total	174.777	99			
a. Dependent Variable: MEANUE						
b. Predictors: (Constant), MEANFC, MEANPE, MEANEE						

Using the coefficients table, we can predict the dependent variable from the independent variables (p 0.012, 0.053, 0.003, and 0.000) and assess if the dependent variable contributes substantially to the model.

Table 8.1 Coefficients of Regression

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.735	.286		2.569	.012
	MEANPE	.161	.089	.184	1.813	.053
	MEANEE	.167	.110	.179	1.514	.003
	MEANFC	.565	.114	.553	4.950	.000
Dependent Variable: MEANUE						

CHAPTER 5

DISCUSSION

The study's initial objective is to identify the elements that influence the adoption of e-commerce by different Pakistani communities. The results in this regard showed some of the vital variables that different agencies need to keep in mind, along with providing comfort and ease of shopping to customers and encouraging them to purchase a few items and offers. The increasing trend toward globalization has also contributed to the increased importance of e-commerce in organizations. In order to increase their worldwide commercial business expertise, organizations are increasingly turning to the implementation of extensive e-trade infrastructure.

SMEDA and SBP have a close working connection at the institutional level. SMEDA is a member of SBP committees that are unique. SMEDA's views on small and medium-sized enterprises (SMEs) are disseminated via the appropriate committees and channels. SMEDA describes the ties with SBP-SME bodies as professional and inviting. SMEDA collaborated in the development of the SME financial package. Covid-19 policies, on the other hand, are the result of cooperation between the Ministry of Industry and the Covid-19 Commission. Ehsas has also taken the lead in terms of the social aspect at the grassroots level.

When it comes to initiating policy, SMEDA has partnered with Ehsas, the SBP, instead of taking the lead. Even the work that has already been done is not projected to SMEDA. Even while SMEDA is responsible for huge agricultural projects in Punjab, the same programs aren't big enough to make a difference on the local level. Similar to visibility and surcharge analysis, there is indeed a political banking industry component to it.

The Multan Industrial Development Corporation, the Islamabad Union of Small Traders, and the Islamabad Chamber of Commerce are the three most significant stakeholders in supporting small and medium-sized businesses (MCCI). Sgsy, MOIP, and SMEs may all benefit from these district-level interactions. Due to a number of initiatives carried out by Patiala Small Industries Corporation (Student form), a significant stakeholder, small businesses in Punjab have prospered. Small companies are eligible to seek for loans from the corporation (SSIs).

The Technical Education and Technical Education Authority (TEVTA) provides technical and vocational training for a more competitive workforce to small enterprises in Punjab. Multan, for instance, is the location of the Polytechnic, the Blue Pottery, technical institutions, and institutes for vocational training for people of both sexes. In Multan, there are 18 TEVTA institutes. The role of TEVTA may be crucial in assisting SMEs in developing their skill set.

To close the economic gap, small enterprises must have access to financial institutions. Government-owned banks and commercial banks both play a variety of responsibilities when it comes to helping small and medium-sized businesses. SME Bank, a specialised government organisation, provides the best services to SMEs. In 2001, the Regional Development Finance Corporations (RDFC), the Enterprise Finance Corporation (SBFC), and the Youth Investment Promotion Institute (YIPS) were all combined into a single organisation known as the "SME Bank."

The goal of the SME Bank is to provide small and medium-sized businesses (SMEs) with financial and technical support in order to increase the region's capacity for development, exports, and the creation of new businesses and jobs. The overseeing organisation for those other manufacturing banks is the Banking Sector (SBP). As a result, the SBP's response stood out from that of other

commercial banks. Small and medium-sized firms (SMEs) must be defined, and SBP must develop SMEs policy frameworks and give advice to other financial institutions.

According to (Molla & Licker, 2005) to think, in 2019 the development of e-commerce as a commercial requirement has been forced by the rise in competition and advancements in information technology. Examining how e-commerce influences the behaviour of Pakistani consumers is another objective. These findings show that the development of e-commerce has pushed consumers to make significant purchases and buy a variety of goods and services. Due of how simple it is for users to make purchases on e-commerce websites,

Consequently, according to the literature (Hwangbo, Kim, et al. 2018), consumers' approval of online shopping is a result of how simple it is for them to make significant purchases. Nonetheless, traditional customers frequently make sizable purchases online, per (Aziz, Agustina, et al. 2018). They find it difficult to understand this admiration, and they are afraid of any challenges or issues that might arise.

Electronic trade, also referred to as electronic commerce, is a modern distribution channel that is fast growing. It can go from being an afterthought to an essential component of a company's revenue model when employed as the primary method of engaging with customers. E-commerce has flourished globally as a result of the growing number of consumers who are interested in buying things from other nations due to considerations like product quality, cultural diversity, and a greater selection of options. A dealer for clients using an online platform might be located anywhere in the world, and Pakistan's e-commerce might be better able to serve a variety of international locations. With a population of more than 22 million, 36 percent of whom live in urban areas and 65 percent of whom live in rural regions, Pakistan is the sixth-largest country in

the world. 78.9 million of the population is female, which is more than 52% of the total. Furthermore, the nation has the world's highest proportion of youthful people. Nearly one-half of all Americans are under the age of thirty-four. Ninety-one percent of the population is under the age of 54, according to the most recent census data. Online social networking usage has now become commonplace in most people's everyday lives. As a result, it's become a hotbed for new ideas across the whole industry.

IT for business has seen tremendous growth over the last two decades. This growth is being witnessed globally. Furthermore, it may be simply observed that the vast majority of the arena's broadband customers reside in Asia. Internet usage in Pakistan is increasing at an accelerating rate every year. The ultimate 'Tele-Density' in the monarchy has come to feelings and experiences regarding a certain object or administration, which is also fascinating to mention. It's important to note that B2C and B2B are the two primary regions of the E-physical trade games.

With the growth of Pakistan's IT sector, individuals are expanding their businesses and exploring new horizons. Internet-based groups have beaten the arena, as the common adage goes, nowadays, and Pakistan is following suit. There are many misconceptions about e-commerce business growth because of a lack of information. They believe it is unreliable, have limited views about e-business, and are concerned about funds transfer and price techniques via the internet.

As a result, it eliminates the following three major areas of digital commerce: attracting new consumers, increasing the current customer base, and expanding new markets, as well as exploring new and existing sales channels for old and future diverse contemporary products. SMEs and marketers in Pakistan are held back from entering the "cyberspace" market because of this type of incorrect belief. Countless Pakistanis will acknowledge that products can be purchased online and

payments can be made via the internet without having to interact physically with the market. E-business lacks this kind of "mingling effect" because of the lack of on-site exchanges, which can be seen in many cases. Because of this, conducting business in Pakistan often takes place in a hands-on manner. The E-business exchanges' anonymity does not guarantee that these links can be replaced.

In addition, tiny neighborhood businesses rather than national chains control the majority of Pakistan's retail market. In order to run these small local firms, a group of less-educated businesspeople has been brought in to help. As a result, Pakistan's literacy rate has been stuck at approximately 54% for many years, as stated. Professional literate individuals who are comfortable using a laptop come into this group. In a state where 75% of people are computer illiterate, it is impossible to envisage the development and advancement of e-commerce.

What's at stake is not whether the study's findings are consistent with its intended outcomes. Three hypotheses have been created for empirical testing in order to achieve the study's aims. All of the theories have been proven correct. A full-size link between the effectiveness of Pakistani small and medium-sized enterprises (SMEs) and their usage of e-commerce can be shown in the direct theories.

H1: There is a significant relationship between performance expectancy and use of e-commerce.

Expected performance (PE) and e-commerce use (UE): In both online and brick-and-mortar stores, performance expectations have a significant influence on e-commerce adoption. According to the H1 findings, both traditional retailers and natural gamers believe that high-performance expectations lead to the overuse of e-commerce, and the reverse is also true. Based on Venkatesh

et al. 2003 research, UTAUT's performance expectation components have a significant influence on user behavior. This may be seen in prior works as well (Adam, Kotze, et al. 2011). It was shown that adopters believed that adopting e-commerce might improve their work performance, perceived usefulness, and extrinsic motivation in addition to their job-fitness in a commercial environment.

H2: There is significant relationship between effort expectancy and use of e-commerce.

Use of e-commerce(UE) and Expectation of Effort According to the results of click-and-mortar, there is a significant impact on the usage of e-commerce when it comes to attempting expectancy. Hypotheses two and three are no longer supported by pure players, according to(Brown, Venkatesh, et al. 2014). UTAUT-derived effort expectation components have a profound influence on user behavior. Other IT-related literature lends credence to this (Shahzad, Chin, et al. 2020). Other researchers stated that effort expectancy had become a minor component of the study.

The Henseler and variation tests have also shown that heterogeneity was present within the EE-UE dates. As a result, even the most casual users of e-commerce from brick-and-mortar businesses assume that it will be simple to use. Because of this, click-and-mortar companies are more inclined to adopt Internet commerce if they appreciate and find it engaging. The eco-device of an e-commerce platform cannot compete with a pure-quick player's learning. They most frequently come from the IT industry because of their extensive knowledge and skill in swiftly and effectively establishing an online store. Pure gamers, on the other hand, wouldn't be persuaded to use e-

commerce if they believed it would improve their job's excitement and be of high quality, interest, smoothness, and quality.

H3: There is significant relationship between facilitating condition and use of e-commerce.

According to H3, favorable conditions have a substantial impact on the adoption of e-commerce by click-and-mortar companies but not by pure gamers. From the perspective of click-and-mortar businesses, enabling circumstances have a considerable impact on the adoption of e-trade. According to past studies(Adam, Kotze et al. 2011), the UTAUT-derived enabling condition constructs have a significant influence on how people use things. (Shahzad, Chin et al. 2020)

5.1 IMPLICATIONS

The study procedure needs to be altered in light of the new emphasis on e-commerce and the performance of small and medium-sized businesses. E-commerce usage is influenced by a variety of elements, according to UTAUT, and these features were examined in this study.

Previous studies have mostly focused on the adoption of e-commerce by consumers (Cheah & Phau, 2011) (Alkhunaizan Love, 2012) (Ghalandari, 2012) (Vasileiadis, 2014) (Sohrabi & Akmar, 2013). According to previous research, this study looked at how adopters used e-commerce and classified them into two categories: those who used it via a web browser and those who used it entirely online. Using the club of adopters as a unit of analysis, e-commerce may be evaluated in terms of business performance. As a result of the advantages of e-commerce adoption, click-and-mortar, and pure-play firms exhibit distinct characteristics. Therefore, reliable information on how business owners use f o is required in order to improve the study's results.

The usage of e-commerce is strongly linked to a person's expectations of performance, effort, and enabling conditions. As a result, e-commerce platform providers may wish to pay attention to the value SMEs place on the amount of work and performance necessary to implement e-commerce. We found that the platform's perceived utility, simplicity of use, and simplicity must be introduced; however, only click-and-mortar companies believe that e-commerce should be convenient, while pure players do not. This gadget will be used by as many small businesses as possible if they find e-trade to be simple to use, help them complete their jobs, lower their current burden, and need much less effort to learn and handle. A complete user guide should be supplied to users whenever a new generation of public-use technology is released.

How to Create a System with Better Interactions? The introduction of mobile communication in chat applications may also boost the interaction between a few stakeholders in terms of effective speech exchange for many vendors, platform operators, and consumers. Data communication and averting misunderstandings may both be made easier with the help of chat applications. The improvement of communication and simplification of marketing and purchasing processes will be facilitated by bridging the distance between stakeholders.

With regards to Infrastructure and Technical Facilities, it is clear that: Operators in the e-commerce industry and government agencies must not overlook the enabling circumstances and ensure that the resources required to engage in e-commerce are readily available. The company must have ready and available the necessary facilities for conducting e-commerce, including computers, servers, backup assistance, and other technological systems. E-commerce workers' reputations are negatively harmed by the lack of appropriate infrastructure and technology assistance, particularly from brick-and-mortar businesses.

Small and medium-sized businesses (SMEs) may benefit from e-commerce, according to research. SMEs of all kinds may benefit from e-commerce since it allows them to enter new markets and suppliers at reduced costs. As e-commerce grows, governments must acknowledge that small and medium-sized businesses (SMEs) are becoming more productive, which will contribute to more GDP growth. A new financial industry that boosts a country's competitiveness must thus be understood by the government. SMEs can improve their performance through e-trade training, which the government should provide. Additionally, the government should create an appropriate environment.

There is a focus on e-commerce issues, as well as the influence it has on a company's capacity to perform its fundamental responsibilities, as well as technical, organizational, and environmental considerations. Before using e-commerce in their businesses, small- and medium-sized enterprises (SMEs) should address many links between e-commerce and the availability of these assets (independent variables). This research has attempted to describe the fundamental underlying causes and abilities required to change the company from its previous business strategy to a click-and-mortar business model using e-commerce.

5.2 FUTURE DIRECTIONS AND RECOMMENDATIONS

Improving Pakistani enterprises' e-commerce performance is a major goal of this study, and it is addressed in many chapters that deal specifically with that topic.

Companies in Pakistan are frequently advised to invest in the agency's infrastructure for e-commerce services enough. As a result of this advice, there will be no interruptions in e-commerce offers' specific features. Increase the performance of websites, hire bright and qualified staff, and provide them with suitable training to make infrastructure changes feasible.

Additionally, eliminating customer security worries and concerns is a key tip for companies looking to improve their online commerce capabilities. Safety issues must be addressed in order to boost consumer trust and confidence. As a result, businesses that are involved in providing goods and services must build up a workforce that is well-versed in security issues.

Similarly, the researcher suggests that organizations solicit customer feedback on the quality of their services on a regular basis. Groups might discover areas where improvements are needed, allowing them to better meet customer satisfaction goals as a consequence of this specific suggestion's rationale.

The findings of this study will be particularly useful to small and medium-sized firms (SMEs) in developing countries, as the majority of participants are from manufacturing organizations. As a way to increase the study's generalizability, SMEs in low-income nations should have been involved in the research. Work in the future must also adhere to the theoretical underpinning of the dynamic capacity principle by thinking about internal and external improved characteristics in order to acquire a competitive advantage.

Recent developments in the world economy have broadened the scope of digital changes, which are no longer only tied to environmental sustainability but also to comfort and closeness to a political market free of restrictions. In today's fast-paced urban environments, customers expect time-saving technologies like virtual windows and smart clocks. As a result of the thin fixed costs connected with the agreement of subsidiaries, conventional internationalization methods need large-scale consumption and massive-scale manufacture.

The financial sector comment thread (Fan, Q. 2019) predicts that in the wake of COVID, the monetary paradigm will be more challenged. There are serious concerns about the viability of

traditional globalization and international interchange as a result of the shift to virtual media. These include the disintegration of multinational conglomerates and the fraying of global value linkages. There appears to be a natural trend toward opposite globalization, and the EC may play a crucial role in blending inward and outward presence in the markets, avoiding unnecessary expenses. EC may be (Subramaniam and Felman 2020). Supply and demand are shifting toward more Spartan eating habits, and the market wants to change and become more robust. Also important is a need for financial recovery that incorporates waste savings and process implementation.

SMEs will be able to compete on a more level playing field in the global marketplace if they adopt a digital strategy. It's safe to say that having a presence in the digital market will open up more career options for you. While policymakers and management must keep an eye on this transformation, businesses can only choose whether or not to participate. The latter, on the other hand, has the potential to serve as a kind of resolution. The significance of organizational readiness is simple to limit the prices and risks inherent to the transition. When it comes to fulfilling orders, the biosphere will play a significant role, as correct procedures will make the process easier and promote the current state of virtual cost channels and trustable marketplaces. For new business models and digital operations to be adopted, policy movements must supply the technique but also regulations for selling trust and simplifying bureaucratic processes.

In order for markets to function, demand and supply forces must be committed, and this is why insurance providers seek to play a multifaceted role. Digital buyers are allowed to grow via public procurement at first. Second, by constantly promoting the markets' dependability and strengthening the gadget's acceptance of its procedures. Subsidies and other fiscal incentives, in addition to traditional policy tools, should encourage small and medium-sized businesses and people to adopt these practices. For this reason, the counsel of deeper evaluations of the coolest

practices in the digitalized industries must be disseminated across the entrepreneurial fabric. Marketers and company owners throughout the world are under increasing pressure to expand into virtual marketplaces, regardless of their size. SMEs must use this opportunity now to ensure their long-term survival and resiliency.

The findings of this research are very helpful to Pakistani manufacturing SMEs. Using the same theoretical underpinnings, a similar study may be undertaken in other rapidly developing international regions. For small businesses in the retail and service industries, the observe version might be a useful tool to have. Open innovation and introduced advanced innovation may also be examined as mediators in future research.

It's possible that a lack of research into the acceptance of differentiating between B2B, B2C, and C2C e-commerce kinds has led to discrepancies in the outcomes of certain e-commerce sites and the extent of their capabilities. As a result, researchers may examine the acceptance and performance of B2B, B2C, and C2C in their study.

5.3 CONCLUSION

For the purposes of this study, we are looking at how e-commerce is used by different sorts of Pakistani consumers. Only a few hand-picked small and medium-sized businesses. Both adopters believe that the definition of e has a huge relationship with SME performance. Accordingly, a deeper look is necessary to put up consistent results. Indirectly, this study empirically adds here to the frame of knowing by employing testing out the current UTAUT notion.

Overall performance expectations, effort expectations, and the enabling situation all have an effect on whether or not SMEs use e-commerce, according to the findings of this study. Meanwhile, the impact of social effect and observed chances are determined to be minor on this observation both

to click on-and-mortar and genuine. Thus, this study has supplied important knowledge and facts to governments, e-trade carriers, software program creators, and e-business provide chain stakeholders to grasp better about applying t s by using Pakistani SMEs.

QUESTIONNAIRE

Appendix

1.1 Section 1

	1	2
Gender	Male	Female

	1	2
Marital Status	Married	Unmarried

	1	2	3	4	5
Qualification	Intermediate	Graduation	Master	MS/MPhil	PHD

1.2 Section 2

1.2.1 Performance Expectancy: Insert your mark opinion in regard of the option

1 = “Strongly Disagree, 2 = “Disagree”, 3 = “Neutral”, 4 = “Agree”, 5 = “Strongly Agree”

Performance Expectancy		1	2	3	4	5
PE1	To what extent do you believe that using e-commerce will enhance your SME's overall performance in Pakistan?					
PE2	How likely do you think that using e-commerce will improve your SME's competitiveness in Pakistan?					
PE3	To what extent do you think that using e-commerce will improve your SME's customer satisfaction in Pakistan?					
PE4	How important is it for your SME to use e-commerce to achieve its performance goals in Pakistan?					
PE5	How confident are you that using e-commerce will result in positive outcomes for your SME in Pakistan?					

1.3 Section 3

1.3.1 EFFORT EXPECTANCY: Insert your mark opinion in regard of the option

1 = “Strongly Disagree, 2 = “Disagree”, 3 = “Neutral”, 4 = “Agree”, 5 = “Strongly Agree”

EFFORT EXPECTANCY		1	2	3	4	5
EE1	To what extent do you believe that using e-commerce is easier than traditional business operations for your SME in Pakistan?					
EE2	How much effort is required to use e-commerce platforms for conducting business operations in Pakistan?					
EE3	To what extent do you believe that using e-commerce is user-friendly for your SME in Pakistan?					
EE4	How easy is it for your SME to learn and use e-commerce platforms in Pakistan?					
EE5	How much time and resources are required to adopt and use e-commerce for your SME in Pakistan?					

1.4 Section 4

1.4.1 FACILITATING CONDITION: Insert your mark opinion in regard of the option

1 = “Strongly Disagree, 2 = “Disagree”, 3 = “Neutral”, 4 = “Agree”, 5 = “Strongly Agree”

FACILITATING CONDITION		1	2	3	4	5
FC1	To what extent do external factors such as government policies and regulations facilitate the use of e-commerce in your SME in Pakistan?					
FC2	How much e-commerce service providers provide support and assistance to your SME in Pakistan?					
FC3	To what extent does your SME have the necessary resources such as technological infrastructure and skilled personnel to adopt and use e-commerce in Pakistan?					
FC4	To what extent do you believe that the use of e-commerce will improve the relationship with suppliers and customers for your SME in Pakistan?					
FC5	To what extent does your SME perceive the use of e-commerce as an opportunity for growth and expansion in Pakistan?					

1.5 Section 5

1.5.1 USE OF E-COMMERCE: Insert your mark opinion in regard of the option

1 = “Strongly Disagree, 2 = “Disagree”, 3 = “Neutral”, 4 = “Agree”, 5 = “Strongly Agree”

USE OF E-COMMERCE		1	2	3	4	5
UE1	How frequently does your SME use e-commerce platforms to conduct business operations in Pakistan?					
UE2	What type of e-commerce platforms does your SME use for conducting business operations in Pakistan?					
UE3	How important is the use of e-commerce in improving the efficiency and effectiveness of your SME's business operations in Pakistan?					
UE4	How has the use of e-commerce affected your SME's sales and revenue in Pakistan?					
UE5	How has the use of e-commerce improved your SME's customer relationship management in Pakistan?					

1.6 Section 6

1.6.1 SME'S PERFORMANCE: Insert your mark opinion in regard of the option

1 = "Strongly Disagree, 2 = "Disagree", 3 = "Neutral", 4 = "Agree", 5 = "Strongly Agree"

SME'S PERFORMANCE		1	2	3	4	5
SP1	How would you rate your SME's overall performance in Pakistan?					
SP2	How has your SME's performance changed since adopting e-commerce in Pakistan?					
SP3	To what extent do you believe that the use of e-commerce has contributed to your SME's success in Pakistan?					
SP4	How satisfied are you with your SME's performance in relation to your performance goals in Pakistan?					
SP5	How likely are you to recommend the use of e-commerce to other SMEs in Pakistan?					

REFERENCE

- Abebe, M. (2014). "Electronic commerce adoption, entrepreneurial orientation and small-and medium-sized enterprise (SME) performance." Journal of small business and enterprise development.
- Abou-Shouk, M. A., et al. (2016). "Using competing models to evaluate the role of environmental pressures in ecommerce adoption by small and medium sized travel agents in a developing country." Tourism Management **52**: 327-339.
- Adam, R., et al. (2011). "Acceptance of enterprise resource planning systems by small manufacturing Enterprises."
- Adham, K. A. and M. Ahmad (2005). "Adoption of web site and e-commerce technology among Malaysian public companies." Industrial Management & Data Systems.
- Afaqi, M. I. (2010). "The Idea of the Holy-Interpretation and Analysis." Al-Hikmat. c **30**: 1-15.
- Ahmad, M. O., et al. (2012). Factors influencing the adoption of e-government services in Pakistan. European, Mediterranean & Middle Eastern conference on information systems.
- Ahmed, Z., et al. (2017). "User perception of mobile banking adoption: an integrated TTF-UTAUT model."
- Al Mursalin, J. (2012). "Information system adoption and usage: Validating UTAUT model for Bangladeshi SMEs." International Journal of Management, IT and Engineering **2**(10): 1-19.
- Ali, S. (2013). "The small and medium enterprises and poverty in Pakistan: An empirical analysis." Ali, Sharafat (2013). The Small and Medium Enterprises and Poverty in Pakistan: An Empirical Analysis. European Journal of Business and Economics **8**(2): 25-30.
- Alkhunaizan, A. and S. Love (2012). "What drives mobile commerce? An empirical evaluation of the revised UTAUT model." International Journal of Management and Marketing Academy **2**(1): 82-99.
- Azam, M. and M. Quaddus (2009). "How Organisational Characteristics Explain the Adoption of e-Commerce by the SMEs in Bangladesh?"

Azeem, M. M., et al. (2015). "Impact of E-Commerce on Organization Performance; Evidence from Banking Sector of Pakistan."

Aziz, R. A., et al. (2018). "The impact of using children's literature for bibliotherapy purposes on children experiencing divorce." Advanced Science Letters **24**(1): 378-380.

Bai, S., et al. (2015). "Optimizing variable opaque product design in E-commerce based on blind booking." Procedia Computer Science **60**: 1676-1686.

Baig, M. M. A. and A. R. Bilal (2018). "Reorganization of Risk Management in Public Sector Specialized Financial Institutions: Evidence from Small and Medium Enterprise Bank Limited of Pakistan." Abasyn University Journal of Social Sciences (AJSS) **11**(Special Issue-IGCETMA).

Bandura, A. (1986). "Fearful expectations and avoidant actions as coeffects of perceived self-efficacy."

Bari, F. and A. Cheema (2005). "SME development in Pakistan analyzing the constraints to growth."

Berry, A., et al. (1998). "The potential role of the SME sector in Pakistan in a world of increasing international trade [with comments]." The Pakistan Development Review: 25-49.

Bhutta, M. K. S., et al. (2008). "Owner characteristics and health of SMEs in Pakistan." Journal of small business and enterprise development.

Bock, G.-W., et al. (2012). "The progression of online trust in the multi-channel retailer context and the role of product uncertainty." Decision Support Systems **53**(1): 97-107.

Brown, S. A., et al. (2014). "Expectation confirmation in information systems research." Mis Quarterly **38**(3): 729-A729.

Cameron, S., et al. (2006). "Export Function Estimates for the Pakistan Carpet Industry [with Comments]." The Pakistan Development Review: 1287-1297.

Cheah, I. and I. Phau (2011). "Attitudes towards environmentally friendly products: The influence of ecoliteracy, interpersonal influence and value orientation." Marketing Intelligence & Planning.

Chen, L. and R. Wang (2016). "Trust development and transfer from electronic commerce to social commerce: an empirical investigation." American Journal of Industrial and Business Management **6**(05): 568.

Chiu, T. M. and B. P. Ku (2015). "Moderating effects of voluntariness on the actual use of electronic health records for allied health professionals." JMIR medical informatics **3**(1): e2548.

Choi, S.-Y., et al. (1997). The economics of electronic commerce, Macmillan Technical Publishing Indianapolis, IN.

Chuang, T.-T., et al. (2007). "Examining the impact of organisational and owner's characteristics on the extent of e-commerce adoption in SMEs." International Journal of Business and Systems Research **1**(1): 61-80.

Cohen, J. F., et al. (2013). "South African physicians' acceptance of e-prescribing technology: an empirical test of a modified UTAUT model." South African Computer Journal **50**(1): 43-54.

Coppola, D., et al. (2021). "Fish waste: From problem to valuable resource." Marine drugs **19**(2): 116.

Costa, J. and R. Castro (2021). "SMEs must go online—E-commerce as an escape hatch for resilience and survivability." Journal of Theoretical and Applied Electronic Commerce Research **16**(7): 3043-3062.

Dahbi, S. and C. Benmoussa (2019). "What hinder SMEs from adopting E-commerce? A multiple case analysis." Procedia Computer Science **158**: 811-818.

Dar, M. S., et al. (2017). "Small and medium-size enterprises in Pakistan: Definition and critical issues." Pakistan Business Review **19**(1): 46-70.

Dasanayaka, S. (2008). "SMEs in globalized world: A brief note on basic profiles of Pakistan's small and medium scale enterprises and possible research directions." Business Review **3**(1): 69-77.

De Massis, A., et al. (2018). Innovation with Limited Resources: Management Lessons from the German Mittelstand, Wiley Online Library. **35**: 125-146.

Dewan, S. and K. L. Kraemer (2000). "Information technology and productivity: evidence from country-level data." *Management science* **46**(4): 548-562.

Di Fatta, D., et al. (2018). "The determinants of conversion rates in SME e-commerce websites." *Journal of Retailing and Consumer Services* **41**: 161-168.

dos Santos, V. F., et al. (2017). "E-commerce: A short history follow-up on possible trends." *International Journal of Business Administration* **8**(7): 130-138.

Ejaz, S. (2012). "Role of High-Performance Work Systems in SMEs (Doctoral dissertation, Foundation University, Islamabad)."

Ghalandari, K. (2012). "The effect of performance expectancy, effort expectancy, social influence and facilitating conditions on acceptance of e-banking services in Iran: The moderating role of age and gender." *Middle-East Journal of Scientific Research* **12**(6): 801-807.

Golovko, E. and G. Valentini (2011). "Exploring the complementarity between innovation and export for SMEs' growth." *Journal of international business Studies* **42**(3): 362-380.

Grandon, E. E. and J. M. Pearson (2004). "Electronic commerce adoption: an empirical study of small and medium US businesses." *Information & management* **42**(1): 197-216.

Hajli, M. N., et al. (2015). "Health care development: integrating transaction cost theory with social support theory." *Informatics for Health and Social Care* **40**(4): 334-344.

Hancock, B., et al. (2001). *An introduction to qualitative research*, Trent focus group London.

Hanna, F., et al. (2016). *Minimizing rental cost for multiple recipe applications in the cloud*. 2016 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW), IEEE.

Haque, S. M., et al. (2007). "A numerical model of an electrostatic precipitator."

Hua, K., et al. (2019). "The future of aquatic protein: implications for protein sources in aquaculture diets." *One Earth* **1**(3): 316-329.

Hussin, H. and R. M. Noor (2005). Innovating business through e-commerce: Exploring the willingness of Malaysian SMEs. Proceedings of the Second International Conference on Innovation in IT, Citeseer.

Hwangbo, H., et al. (2018). "Recommendation system development for fashion retail e-commerce." Electronic Commerce Research and Applications **28**: 94-101.

Indahwati, R. and N. N. Afiah (2014). "Predicting SME's intention to adopt accounting software for financial reporting in Medan City, Indonesia." Research Journal of Finance and Accounting **5**(8): 130-138.

John, H. (2003). "The Reality of E-commerce with developing Countries." Int. J. Inf. Eng. Electron. Bus **4**: 12-76.

Kalakota, R. and A. B. Whinston (1997). Electronic commerce: a manager's guide, Addison-Wesley Professional.

Khalique, M., et al. (2011). "Challenges faced by the small and medium enterprises (SMEs) in Malaysia: An intellectual capital perspective." International Journal of current research **3**(6): 398.

Khan, M., et al. (2016). OSaaS: Online shopping as a service to escalate E-commerce in developing countries. 2016 IEEE 18th International Conference on High Performance Computing and Communications; IEEE 14th International Conference on Smart City; IEEE 2nd International Conference on Data Science and Systems (HPCC/SmartCity/DSS), IEEE.

Khan, M. I. and M. Ali Qureshi (2007). "The small and medium enterprises Act as catalyst for economic growth and development in Pakistan: Economic growth and development perspective."

Khan, Z. A., et al. (2019). "A new users rating-trend based collaborative denoising auto-encoder for top-N recommender systems." IEEE Access **7**: 141287-141310.

Khaskheli, A. and Y. Jun (2016). "A Review on the Importance of E-Commerce for SMEs in Pakistan." RISUS-Journal on Innovation and Sustainability **7**(1-2016).

Kraemer, K. L., et al. (2005). "Impacts of globalization on e-commerce use and firm performance: A cross-country investigation." The information society **21**(5): 323-340.

Krauss, S. E. (2005). "Research paradigms and meaning making: A primer." The qualitative report **10**(4): 758-770.

Kulviwat, S., et al. (2007). "Toward a unified theory of consumer acceptance technology." Psychology & Marketing **24**(12): 1059-1084.

Kureshi, N., et al. (2009). "Quality management practices of SME in developing countries: a survey of manufacturing SME in Pakistan." Journal of Quality and Technology Management **5**(2): 63-89.

Kwahk, K.-Y. and X. Ge (2012). The effects of social media on e-commerce: A perspective of social impact theory. 2012 45th Hawaii international conference on system sciences, IEEE.

Lefebvre, L.-A., et al. (2005). "Exploring B-to-B e-commerce adoption trajectories in manufacturing SMEs." Technovation **25**(12): 1443-1456.

Li, Q., et al. (2014). Predicting determinants and moderating factors of mobile phone data flow service adoption. 2014 Seventh International Joint Conference on Computational Sciences and Optimization, IEEE.

Licker, P. and N. Motts (2000). Extending the benefits of e-commerce in Africa: Exploratory phase. Proceedings of the First Annual conference of the Global IT Management Association.

Lin, X., et al. (2019). "Building e-commerce satisfaction and boosting sales: The role of social commerce trust and its antecedents." International Journal of Electronic Commerce **23**(3): 328-363.

McLean, G. and K. Osei-Frimpong (2017). "Examining satisfaction with the experience during a live chat service encounter-implications for website providers." Computers in Human Behavior **76**: 494-508.

Minniti, M., et al. (2006). "Global entrepreneurship monitor 2005 executive report."

Mohamad, R. and N. A. Ismail (2009). "Electronic commerce adoption in SME: The trend of prior studies." Journal of Internet Banking and Commerce **14**(2).

Moll, J. and O. Yigitbasioglu (2019). "The role of internet-related technologies in shaping the work of accountants: New directions for accounting research." *The British Accounting Review* **51**(6): 100833.

Molla, A. and P. S. Licker (2005). "eCommerce adoption in developing countries: a model and instrument." *Information & management* **42**(6): 877-899.

Mustafa, N., et al. (2019). "The impact of organizational changes on increasing SMEs competitiveness." *Acta Universitatis Danubius. (Economica)* **15**(2): 93-114.

Naveed, A. (2012). "Approaches to SME development: Lessons for Pakistan." *Lahore: SMEDA*.

Ndayizigamiye, P. (2012). "A unified approach towards e-commerce adoption by SMMes In South Africa." *International Journal of Information Technology and Business Management* **16**(1): 92-101.

Orr, G. (2003). "Diffusion of innovations, by Everett Rogers (1995)." *Retrieved January 21: 2005*.

Phore, N. A. and F. M. Shaikh (2010). "The Role of SMEs in the Internationalization of Trade: A Case of Pakistan." *Journal of Business Strategies* **4**(1): 7.

Rana, A., et al. (2007). "The SME pulse: An exploratory study of the performance of SMEs in Pakistan and the characteristics of successful firms." *Small and Medium Enterprise Center, Lahore University of Management Sciences* **3**(1): 47-53.

Rohm, A. J. and G. R. Milne (1998). *Emerging marketing and policy issues in electronic commerce: attitudes and beliefs of Internet users*. Marketing and public policy proceedings, American Marketing Association Chicago.

Rohra, C. and I. A. Panhwar (2009). "The role of SMEs towards exports in Pakistan economy." *Australian Journal of Basic and Applied Sciences* **3**(2): 1070-1082.

Safia, A., et al. (2019). "The impact of social media characteristics on e-commerce use behaviour among youth in developing countries." *International Journal of Information Systems and Change Management* **11**(2): 188-207.

Sanjaya, W. M., et al. (2018). The development of quail eggs smart incubator for hatching system based on microcontroller and Internet of Things (IoT). 2018 International Conference on Information and Communications Technology (ICOIACT), IEEE.

Saridakis, G., et al. (2019). "SMEs' internationalisation: When does innovation matter?" Journal of Business Research **96**: 250-263.

Schwartz, S. H. and T. Rubel (2005). "Sex differences in value priorities: cross-cultural and multimethod studies." Journal of personality and social psychology **89**(6): 1010.

Scupola, A. (2009). "SMEs'e-commerce adoption: perspectives from Denmark and Australia." Journal of Enterprise Information Management.

Serben, D. F. (2014). The examination of factors influencing social media usage by African American small business owners using the UTAUT model, Capella University.

Shahzad, A., et al. (2020). "Malaysian SME's performance and the use of e-commerce: A multi-group analysis of click-and-mortar and pure-play e-retailers." Pakistan Journal of Commerce and Social Sciences (PJCSS) **14**(1): 1-33.

Shore, B. (1998). IT Strategy: The Challenge of Over-regulation, Culture, and Large-scale Collaborations, Taylor & Francis. **1**: 1-4.

Sila, I. (2015). "The state of empirical research on the adoption and diffusion of business-to-business e-commerce." International Journal of Electronic Business **12**(3): 258-301.

Simmons, G., et al. (2008). "A conceptualization of the determinants of small business website adoption: Setting the research agenda." International Small Business Journal **26**(3): 351-389.

Smith, P. R. and D. Chaffey (2008). eMarketing Excellence, Routledge.

Sohrabi, S. N. and I. M. Akmar (2013). "Investigations on e-trust and e-satisfaction of customers for e-loyalty: The case of Iranian e-commerce." Актуальні проблеми економіки(1): 492-502.

Soomro, R. H. and F. Aziz (2015). "Determining the size of thresholds of Small and Medium Enterprises definition." International Journal of Management, IT and Engineering **5**(1): 63-71.

Stiglitz, J. E. (1988). "Economic organization, information, and development." *Handbook of development economics* **1**: 93-160.

Storey, D. J. (2016). *Understanding the small business sector*, Routledge.

Subramaniam, A. and J. Felman (2020). *How Deglobalization Is Hurting the World's Emerging Economies*. World Economic Forum.

Sunayana, K. and R. Parveen (2019). *The impact of e-commerce on organizational performance of the Indian travel agencies*. Tourism International Scientific Conference Vrnjačka Banja-TISC.

Susanty, A., et al. (2020). "Push-pull-mooring framework for e-commerce adoption in small and medium enterprises." *Journal of Enterprise Information Management*.

Tai, Y.-M. and Y.-C. Ku (2013). "Will stock investors use mobile stock trading? A benefit-risk assessment based on a modified UTAUT model." *Journal of Electronic Commerce Research* **14**(1): 67.

Tan, J., et al. (2007). "Business-to-business adoption of eCommerce in China." *Information & management* **44**(3): 332-351.

Teo, T. S. and C. Ranganathan (2004). "Adopters and non-adopters of business-to-business electronic commerce in Singapore." *Information & management* **42**(1): 89-102.

Thompson, P., et al. (2013). "Are UK SMEs with active web sites more likely to achieve both innovation and growth?" *Journal of small business and enterprise development*.

Thompson, R. L., et al. (1991). "Personal computing: Toward a conceptual model of utilization." *Mis Quarterly*: 125-143.

Traver, G. and C. Laudon (2001). *E-commerce*, Adison Wesley.

Turban, E., et al. (2007). *Information technology for management: Transforming organizations in the digital economy*, John Wiley & Sons, Inc.

Van Akkeren, J. and D. Harker (2003). "The mobile internet and small business: an exploratory study of needs, uses and adoption with full-adopters of technology." *Journal of research and practice in Information Technology* **35**(3): 205-220.

Vasileiadis, A. (2014). "Security concerns and trust in the adoption of m-commerce." Socialinės Technologijos **4**(01): 179-191.

Waseem, A., et al. (2018). "Factors affecting E-commerce potential of any country using multiple regression analysis." Journal of Internet Banking and Commerce **24**(2): 1-28.

Williams, P. W. (2009). Assessing mobile learning effectiveness and acceptance, The George Washington University.

Wojtkowski, W. and J. C. Hardesty (2001). Reality of use and nature of change in small business: A case study in inefficient compromise. Pitfalls and Triumphs of Information Technology Management, IGI Global: 217-225.

Yang, K. (2010). "Determinants of US consumer mobile shopping services adoption: implications for designing mobile shopping services." Journal of consumer marketing **27**(3): 262-270.

Yueh, H.-P., et al. (2016). "Employees' acceptance of mobile technology in a workplace: An empirical study using SEM and fsQCA." Journal of Business Research **69**(6): 2318-2324.

Yun, J. J., et al. (2020). "Sustainability condition of open innovation: Dynamic growth of alibaba from SME to large enterprise." Sustainability **12**(11): 4379.

Zheng, J., et al. (2004). "Small firms and e-business: cautiousness, contingency and cost-benefit." Journal of purchasing and supply management **10**(1): 27-39.

Zhou, T. (2012). "Examining location-based services usage from the perspectives of unified theory of acceptance and use of technology and privacy risk." Journal of Electronic Commerce Research **13**(2): 135.

Zhu, K. (2004). "The complementarity of information technology infrastructure and e-commerce capability: A resource-based assessment of their business value." Journal of management information systems **21**(1): 167-202.

Zhu, K. and K. L. Kraemer (2002). "E-commerce metrics for net-enhanced organizations: Assessing the value of e-commerce to firm performance in the manufacturing sector." Information systems research **13**(3): 275-295.