

An Empirical Study of Impact of Electronic Commerce on Business**Feroz Ahmad Baloch¹, Khan Mohammad Wafa², Mohammad Naeem Dost³**¹ Information Technology Departement, Computer Science Faculty, Bost University Helmand Province – Afghanistan² Dean of Computer Science Faculty, Bost University Helmand Province – Afghanistan³ Department of Civil Engineering, Helmand University, Helmand Province, Afghanistan**ARTICLE INFO***Article history:*

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ABSTRACT (10 PT)

The purpose of this study is to emphasize the influence and effect of E-Commerce on business. E-Commerce is purchasing and selling goods and services through the Internet. The company concept is developed to present its services online, allowing clients to choose and purchase the needed things. Web-based business is a way to do business through the Internet. E-Commerce has transformed the nature of business so swiftly and dramatically that what was once revolutionary is now just evolutionary. The study's primary goals are to research the idea and effect of E-Commerce, as well as to present the pros and downsides of E-Commerce. They are considering the study's aims, namely the success of E-Commerce and the challenges of the conventional company, which businesspeople encounter several issues daily. If you conventionally join the market, you will quickly find that competition is fiercer than ever, innovation is costly, and creating and recruiting a team is time-consuming. Solving difficulties and staying on top of the game have serious financial consequences for the firm. More preparation and even more cost-effective explanations are required for you as a business to approach the market. On the other hand, this study concentrates on performing sales and marketing online, which may be more productive than conventional methods. Finally, this article aims to examine E-Commerce's efficacy in contrast to conventional business.

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1. INTRODUCTION

E-commerce is a business strategy that enables businesses and individuals to sell and buy products online. Businesses now have the chance to sell their goods to many customers and market their goods and services online, thanks to the development of e-commerce. The rapid acceleration of globalization brought about by information and communication technologies is one of the most potent forces influencing the world economy and trade today.[1]–[3] Online commerce significantly affects the costs and productivity of the firm. Web-based trading has the potential to be included widely due to its ease of use. The exchange of goods and information over the internet and other online services are made possible by electronic commerce. Online commercial operations for goods and services are electronic commerce or web-based business.[4], [5]

E-Commerce is derived from the English words electronic commerce or electronic commerce. Furthermore, since trade is done directly or face to face. E-Commerce also encompasses the advertising, buying, and product marketing processes. The trade mechanism used differs, namely electronic media or the internet. The whole trade process in E-Commerce is done electronically, from product ordering to data interchange to payment transfer. During the evolution of more complex digital information and technology flows. E-Commerce is a kind of electronic commerce or e-business. This is about the operations of commercial transactions. E-commerce is an example of financial information and communication technology collaboration using internet technology. E-commerce, in general, refers to more than just financial transactions. However, it includes collaboration with

business partners, customer service, job vacancies, etc. One kind of financial technology innovation is e-commerce. E-Commerce necessitates the use of databases, e-mail, and other non-internet technologies in addition to digital technology. For example, how to mail items and how to pay for E-Commerce products.[4], [6], [7]

The advancement of information and communication technology is dependent on electronic commerce. This is especially true in terms of economics. As capitalism globalizes, many bazaars are becoming more cosmopolitan and competitive. While the COVID-19 epidemic is causing enterprises in hard-hit regions to shift to local production, E-Commerce may boost the economy on a local level. Electronic commerce is today deemed exceptional since its fundamental beliefs and practices have fundamentally impacted modern life. Many people now put a high value on commercial internet transactions.[3], [8]–[11]

Businesses have benefited from electronic trade. In this Covid-19 circumstance, all electronic commerce is very much required by many people by giving solutions that may assist many people's activities in satisfying their daily demands, and it is also impacted by the speedy growth of technology at this time, which is expanding very quickly. This enables businesses to strengthen and broaden their present market position by offering a more cost-effective operational distribution sequence for their products and services. The primary goal of this research is to evaluate the concept of E-Commerce, the impact of E-Commerce, the benefits and drawbacks of E-Commerce, and the future of E-Commerce.[2], [9], [12], [13]

2. RESEARCH METHOD

This review article was written in 2022 and is titled "An Empirical Study of the Impact of Electronic Commerce on Business." It is based on secondary data. Overall, the essay gives a brief review of the impact of internet commerce on business and its benefits in our daily lives. The research focuses particularly on the introduction and importance of e-commerce to high-level commercial companies in order to optimize profits. It is a library study that focuses on many elements of E-commerce, and the secondary data sources utilized in this work include well-known journals, books, databases, and websites. This is a quantitative and descriptive study. The data gathering approach is based on credible, respectable, and trustworthy publications that are important to the readers. For data collection in this study, a cross-sectional or one-shot research approach was used.[9], [14], [15]

There are numerous methods to gather data for the qualitative research conducted in this study. However, there are four primary approaches to acquiring information, namely:

1. Observation

Observation is action, which is theory interpretation (Karl Popper). In research, however, it is preferable to leave the theories to support or contradict a hypothesis when entering the classroom to observe. Observation is known as the activity or process of gathering information using observational media. Observation is a method of data collecting that needs researchers to go out into the field and see items relating to space, location, actors, activities, time, events, objectives, and emotions. The most successful observation is to use a blank as an instrument or to complete it with an observation format. The assembled format includes information on the events or behaviors that are expected to occur. Moreover, this study aims to gather information about the current difficulties confronting the expanding economy.

2. Interview

Interviews are direct interactions between the interviewer and the interviewee to provide/receive specific information. According to Moleong (1988:148), interviews are conversational activities carried out by both sides, namely the interviewer and the interview. Interviews are questions asked orally to persons thought to be capable of providing information or explanations for items judged necessary. By distributing questionnaires, we conducted direct interviews with various online store application users to make it simpler for many people to do online transactions and to ask about some of the barriers encountered in using the online application.

3. Literature study

A literature review endeavors to read, examine, and comprehend scientific publications or past studies to get recommendations and supporting foundations for performing research. In this scenario, the writers look for data and information by examining a variety of reference materials such as books, journals, and the internet that are connected or relevant to the subject of research, such as difficulties that arise in insurance firms, as well as data mining theory and methodologies.

3. RESULTS AND DISCUSSION

E-Commerce Definitions:

E-Commerce (Electronic Commerce) is a method of purchasing or trading online or direct selling that uses Internet facilities where there is a website that may supply, obtain and deliver commerce services that will transform all marketing operations and cut operating expenses for activities. trade (trading) (trading). Changes in our everyday culture are brought about by the advancement of technology (tele)communication and computers. Electronic media has become a primary medium for communication and commerce in this period, known as the "information age." E-commerce is an extension of commerce that makes use of electronic media. Although the usage of electronic media is not yet fully understood, the pressures of business force businesspeople to utilize this electronic medium. Understanding E-Commerce Trading is an activity that people have engaged in since the dawn of civilisation. The techniques and means of commerce are always developing in pace with human growth. E-

commerce is the most recent kind of business that is making life simpler for consumers. This article will examine what e-commerce is, how it may make life simpler for its users, and its critical function.

Understanding Electronic Commerce Electronic Commerce (Electronic Commerce), as part of Electronic Business (business done through electronic transmission), is being defined by professionals and business people. In general, e-commerce refers to any types of trade/commerce transactions of commodities or services (trade of goods and services) conducted using electronic means. Apart from what has already been said, it is evident that such commercial operations are part of company activity. Finally, "e-commerce is a subset of e-business." For the time being, the electronic media described in this study are solely concerned with the usage of online media. The reason for this is because, apart from being something that is 'booming,' the usage of the internet is now the most popular utilized by many individuals. It should be noted that as technology advances, it will be feasible to employ network media other than the internet in e-commerce. As a result, we should not limit our thinking to the usage of digital media.

Electronic commerce (e-commerce):

Electronic commerce is defined by many businesses as the use of the Internet as a distribution channel to market and sell items and services to clients. This narrow definition is solely applicable to Internet trade. Electronic commerce encompasses a significantly wider variety of activities. According to Malcolm Frank, V. P. Marketing, Cambridge Technology Partners, electronic commerce involves the electronic exchange of information, commodities, services, and payments and the building and maintenance of Web-based relationships. Consequently, examples include the E.C. Internet, intranets, extranets, electronic data interchange (EDI), and other networks. Electronic commerce includes transaction processing with electronic payment, coordination with business partners such as inventory management, customer self-service such as tracking order status, researching problem resolution, and using a corporate intranet for ubiquitous information distribution.[16], [17]

Benefits of E-Commerce to Business:

- a) Operational Cost Savings - The cost of developing, manufacturing, distributing, storing, and retrieving paper-based information has declined.
- b) International Market - What was once a single physical market in a geographical location has transformed into a borderless market that incorporates both national and global marketplaces. Businesses may now reach customers all around the globe by embracing e-commerce. All online businesses have effectively grown into virtual worldwide organizations.
- c) Mass Customization - E-commerce has altered the way individuals buy products and establish enterprises. The planning contains items and services that will be suited to the demands of the consumer. Customers could pick any tint as long as it was dark when Ford first began building engine automobiles. Customers may design a car to their specifications online in minutes at www.ford.com.
- d) Lower Telecommunications Costs - The Internet is much less expensive than value-added systems (VANs), which depend on renting phone lines for the exclusive use of the company and approved partners. It is also less expensive to send a fax or email via the Internet than to utilize a direct dialing service.[6], [18]

Benefits to the Customers:

For some years now, mass customization has been employed. Numerous conditions allow for the development of particular products for each customer, based on the characteristics and designs each product has that make it unique. Moreover, there must be enough personalization that each unique item for the customer is now worthy of an e-commerce data bank. Relationships between sellers or electronic commerce between consumers or buyers and suppliers will minimize the need for infrastructure in the future, enabling customers to gather data from home, the workplace, or on the road. This direct link will also enable suppliers to collect exact data about client profiles, requests, and purchasing patterns, whether from entire data or goods often bought by customers, and will make it simpler for sellers and buyers.[6], [19]

Benefits of E-Commerce to Society:

- a) Allows for more flexible work practices, increasing personal satisfaction and allowing many community members to telecommute. This is not only more beneficial, but it also results in happier, less stressful working circumstances. This may also minimize environmental pollution since fewer people have to travel to work daily, and it can make it simpler for more people to purchase and sell online, increasing the economy and people's income via commerce.
- b) Connecting People: It enables people in impoverished nations and rural places to appreciate and access unavailable items, administration, information, and other individuals, including people from all over the globe, allowing them to purchase and sell with foreigners.
- c) Facilitating the Provision of Public Services: For example, health administration that can be accessed via the Internet (online conferences with experts and medical officers), filing taxes via the Internet through the Inland Revenue website, and making it

easier for the public to receive public services without having to queue up to make documents or perform health checks are all examples of ways that technology can help.[20]

The disadvantages of E-commerce:

This e-commerce service, however, cannot be isolated from its flaws. This also reveals if the system still has flaws. As a result, you, as a user, must exercise caution while conducting e-commerce transactions. There will be ups and downs, just like any other business. E-commerce has both advantages and disadvantages. Running this kind of business is not without its challenges. However, being aware of such concerns will help individuals in charge of this company avoid the expected consequences. E-commerce disadvantages may be classified as technological or non-technical.

Non-technical disadvantage:

- a. The high expense of developing/constructing an E-Commerce system
- b. Customers' confidence in e-commerce sites is low.
- c. It is challenging to secure online transaction security and privacy.
- d. In purchasing and selling operations, there is a lack of emotion.
- e. This application is rapidly expanding.
- f. In one nation, an Internet connection is neither inexpensive nor secure.

Inability to test items first-hand before buying:

One of the most typical issues encountered while purchasing online is that Customers cannot try on items before purchasing them in this kind of shopping. In another sense, e-commerce eliminates a vital step in the buying process: product testing. Videos marketing items may have been created highly professional and undeniable, but many buyers are cautious and apprehensive about purchasing anything they have not tried and seen before. This is because many clients do not perceive a genuine product quality promise.

Lack of the personal touch:

Many customers appreciate the personal touch, which e-commerce can not provide. In other words, some buyers prefer the personal touch of visiting a shop and talking with salespeople. In the sense that the customer wants to view the product being bought to ensure that it matches the price and the picture given by the vendor. Consequently, there is no opportunity for new ties to be made with online transactions.

This is due to the fact that while buying online, the consumer cannot see the things he is about to purchase. As a result, the customer is unsure if it is acceptable or not. This product issue might also arise as a result of a miscommunication between the vendor and the consumer. The most common example is when selecting clothing sizes. Furthermore, this product compatibility issue might manifest itself in the condition of the items. To prevent the issue of a lack of e-commerce, the best thing you can do is explain clearly before the transaction. For example, instead of using letter sizes like M or XL, it is best to inquire how long and how broad the items are. This will make determining if the item is acceptable simpler.

Delay in delivery:

Waiting for products is one of the online purchasing systems that produces problems. If the customer is eager, purchasing online may need you to wait up to a week, if not longer, to get your goods. When shopping online, the joy that everyone gets when purchasing in person is frequently delayed since customers do not have real things in their hands for some time after purchase. Furthermore, owing to the tight schedule in each month when there is a significant discount on each product sold, ordering items from overseas will result in delivery of up to 1 month longer.

Cost and product feature comparison:

Sellers can affiliate with various things to get the best prices online. Customers like the ability to compare prices, but suppliers dislike it because many prices are removed from suggested and recommended items based on the client's specific price range. Price comparisons made by buyers are very reasonable because every buyer wants to get a low price and good quality for the price.

Damage during the Transportation and Delivery:

Companies that provide goods delivery services are now profiting from the ongoing growth in customer demand for a product. This is partly due to the influx of e-commerce enterprises in Indonesia, technological advancements, and changing

lifestyles. Thus, the delivery of goods has now become a fundamental necessity for everyone, with the expectation that the delivery of goods can be done swiftly, that the state of the products is secure according to the starting circumstances, that the goods arrive on time, and that the goods are delivered to the delivery location. As a result, organizations providing product delivery services must consider quality, cost, and time. These three factors are inextricably linked to the company's offerings .[21]

As a result, delivery service providers must pay close attention to the quality of customer service. The company's attempts to promote customer collaboration include improving the service quality. The company's exceptional and high-quality service to customers will have a beneficial influence on the company's image. This is related to the service's quality; of course, the service has satisfied service quality criteria. As a result, service quality management is required so that businesses may continue to compete, enhance selling points, and acquire customer confidence. As a result, the company's service quality must be maintained and used as a strategy to win the business competition since the quality of service will make customers pleased and loyal, causing consumers to continue to use the company's goods, resulting in stability or higher profits. Company. If the quality of service is poor, it will result in disgruntled clients, leading to a drop in firm profitability.[1]

Customer satisfaction is when customers' expectations of a company's service match what they get. Customers will be unsatisfied if they believe the company's services do not meet their expectations, and vice versa. The reason for discontent with the service is that the services offered by the firm do not meet customer expectations. Essentially, one of the activities in logistics is the delivery of products since logistics operations include delivery of goods, storage, inventory management, invoicing and payment, packing and labeling, and other activities.[22]

Restricted Consumer Services:

If a customer has a question about an item purchased in a physical store, assistants, cashiers, and even store managers are eager to assist. Customer service on e-commerce websites, on the other hand, may be limited; the site can only provide services during a specific work schedule, and calls to customer service can make clients wait for a long time, and when sales are trading outside of operating hours, it will take a very long time to receive the seller's response, so a person who is always active in providing questions or obstacles faced by each buyer.

Technical Disadvantages:

Security Issue:

The main issue, as well as the most significant disadvantage, of e-commerce, is security. Fraud and fake transactions are two things that frequently happen when using this e-commerce. Security concerns are also numerous. Fraud issues, such as items that do not fit and are never shipped, are common in e-commerce. There are numerous ways to avoid this issue. One of them is to read reviews from other store customers. If the review is negative, even if the price is low, you should avoid making a purchase. This is a grave security concern. Furthermore, some e-commerce sites have an e-wallet system. Which users can save money and use the app for shopping? This e-wallet issue is also quite concerning because of numerous reports of users losing balances due to transactions they do not recognize. *Cyber security* is a worldwide issue that must be addressed. Finally, the lack of consistent security solutions makes internet purchasing a risky consumer experience. Many legitimate organizations and global enterprises have been targeted by fraudsters who steal customer data from their databank in recent years. This could result in legal and financial claims. Similarly, it undermines the trust between clients and their suppliers over time.[23], [24]

Need for Internet Connection:

To participate in online purchases, customers must be connected to the Internet and have online access. They will also require a device that can connect to the Internet. Therefore, in today's developments, it is essential to have an internet connection and gadgets that can make it easier to make a trade because having internet access and good quality gadgets will make it very easy for us to offer products that are sold and no longer need to rent a place, saving costs for the seller.

Software development:

As for software development, it is still being made and improved. The internet business is hampered as a result of this. Businesses, for example, must regularly upgrade the software and technology required to enable software development. Because there is no update on the application, there will frequently be delays in accessing the application and frequent problems opening the application if the seller and buyer do not do and follow developments on the application device.[25]–[27]

As for the consequences that affect Electronic Commerce on Business:

The most beneficial effect of E-Commerce on a business is likely to be the assurance of company stability in the face of a global pandemic, which would otherwise result in the closure of businesses of any size or sector. As a result, each company must innovate and develop its online sales process. Despite government lockdowns almost everywhere in the world, it was business as

usual, thanks to the ease of internet buying and selling. The scope of e-commerce is enormous, as evidenced by the fact that e-commerce sales surpassed 850 billion USD in 2020 and are expected to approach 5 trillion USD by the end of 2021.

E-business and online business are not just about websites or groups of websites. It is about a new business concept that incorporates the management and financial principles of the previous company. As a result, E-Company and E-Commerce impact many aspects of business and management control.

1. Management Information System: Examining the structure and use of e-business systems in context, including issues with front-end and back-end system reconciliation.
2. Human Resource Management: Problems with online registration, homework, and 'aspirant innovators' replace long-term representation on a task-by-task basis.
3. Finance and Accounting: In a learning-based economy, 'elusive' human resources and capital should be highly valued in money management, currency exchange issues, accounting claims, and auditing.
4. Economics: The impact of the internet and business on local and global economies, as well as understanding advanced and learning-based economic concepts and how they relate to monetary theory.
5. Production and Operations Management: As a result of the influence of online manufacturing, cycle times have decreased. It also takes a few seconds to transport digital objects and administration online, reducing the optimal time to make requests from days to minutes. The cohort system is linked to financial and marketing systems, business assistants, and customers.

Future E-Commerce Systems:

E-commerce system design is crucial in conceptualizing future Omni channel solutions. The principles of EC system software architectural requirements, current components, and system quality remain essential. System decentralization and smuggling capabilities will need breakthroughs in system interaction. As system processes grow more common, there must be an increase in the number of support services developed for customers, supply chains, organizations, and system initiatives. The present policy automation of e-commerce systems, driven by IoT and AI capabilities such as wearables, augmented reality, intelligent agents, machine learning, and improvements in cognitive and autonomous computing, forecasts organizational growth. The problem of last-mile methodology, which is the unified process of end-to-end delivery in the supply chain, is high on any organization's priority list.

According to system development, autonomous systems are projected to play a critical role in supply chain integration and interoperability. Commercial electronic systems must evolve to withstand the fourth industrial revolution, which requires connection, technical help systems, information transparency, and decentralized decision-making. Anticipating new business ideas requires using a consistent and interoperable solution recognized across the commercial ecosystem. Fast network connections, scalable communication between systems and devices, storage and design, and transaction processing decentralization are all required.

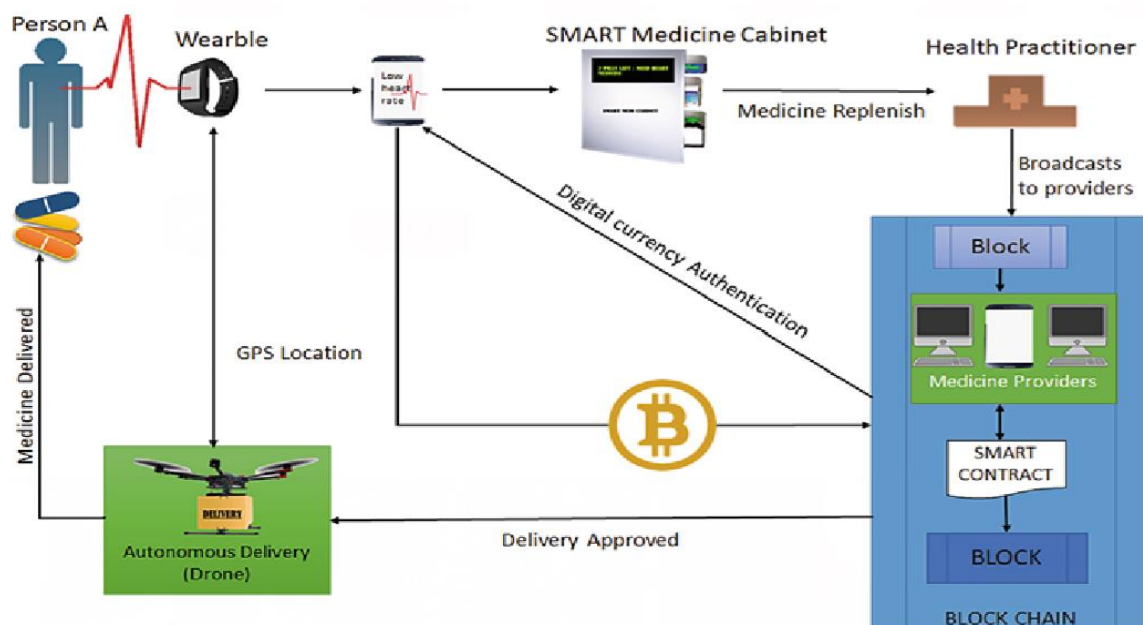


Fig.1: The Future of E-Commerce Systems: 2030 and Beyond

4. CONCLUSION

As modern technology advances, we must maintain our everyday operations up to date with the newest technologies to make our operations more successful and lucrative. With this technology, we can conduct business online and build our businesses in less time. Using numerous websites and online programs, we may do e-commerce from around the globe. We can purchase and sell items with other nations via e-commerce and sell our commodities to individuals in our own country. Organizations have gotten several possibilities and benefits, which they have used to improve their market position and image. E-commerce prevents our organization from incurring unnecessary fees. My recommendation to my fellow citizens is to adopt new technology into their operations to deliver better services to our people.

Along with several benefits, firms must overcome numerous barriers and issues while implementing E-commerce. When employing e-commerce technology, we must pay attention to the security of our company's website or business apps to prevent cyber assaults. E-commerce refers to various online commercial activities focusing on trading commodities electronically. Many businesses describe electronic commerce as using the Internet as a distribution channel for promoting and selling client items and services. Whether or not E-Commerce is engaged, the benefits include lower operational expenses, worldwide marketplaces, mass customization, and lower telecommunications costs. This provides for more flexible work schedules, links people, and improves the delivery of public services. However, E-Commerce has several drawbacks, such as a lack of human interaction, delivery delays, pricing comparisons, product characteristics, and product damage during transit and delivery. After weighing the pros and negatives, I would urge the company's owner to go forward since E-Commerce has several benefits and plays a significant part in the modern economy and development. Moreover, promote it via various social media platforms so that it is widely noticed and sought after by numerous customers.

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