

202315-16th June

DOI: 10.17512/CUT/9788371939563/26

THE NEED-BASED E-COMMERCE ADOPTION FOR SMES AFTER COVID-19 PANDEMIC WITH SPECIAL REFERENCE TO DIGITIZATION AS A MODERATOR

Muhammad Usman Khan

University of Punjab, Department of Philosophy

Maliha Azhar

National University of Modern Languages, Multan CampusDepartment of Management Sciences

Emad Mahrous Awwad, Mohamed Sharaf

King Saud University, College of Engineering

Md Billal Hossain

Hungarian University of Agriculture and Life Sciences, Doctoral School of Economic and Regional Sciences

Csaba Bálint Illés

John von Neumann University

Abstract: The COVID-19 pandemic has significantly impacted small and medium-sized enterprises in Pakistan and Bangladesh, leading to a need for e-commerce adoption. This paper explores the need-based e-commerce adoption for SMEs in these two countries, with a focus on the role of digitization as a moderator. The study highlights the importance of e-commerce for SMEs to remain competitive and meet changing consumer demands and explores the challenges and barriers to adoption in the Pakistani and Bangladeshi contexts. The study concludes that digitization plays a crucial role in enabling SMEs in Pakistan and Bangladesh to effectively leverage e-commerce, and provides recommendations for policymakers and SMEs to promote its adoption in these contexts. Moreover, this study observed in the time of COVID-19, that technological factors have a significant impact on e-commerce adoption. The organizational factors and external environment factors remain passive to encourage SMEs to adopt e-commerce.

Key words: Bangladesh, digitization, e-commerce adoption, Pakistan, pandemic

Introduction

The COVID-19 pandemic has had a significant impact on businesses worldwide, leading to a surge in e-commerce adoption (Bhatti et al. 2020). As people strive to minimize physical contact, the shift towards online shopping has accelerated and is expected to continue even after the pandemic. Brick-and-mortar stores have turned to online sales to reach customers, resulting in the expansion of e-commerce categories like groceries and home goods. The pandemic has forced businesses to expedite their digital transformation plans and embrace e-commerce to stay competitive. Contactless payment methods have also gained popularity to reduce the risk of transmission (Abualrob, Kang 2016).

The growth of e-commerce adoption is closely linked to the increasing digitization of society, which has made it easier for companies to offer their products and services online. The internet, mobile devices, and social media have enabled businesses to reach a wider audience and conduct transactions online. Secure payment gateways have facilitated safe and convenient shopping experiences (Adam et al. 2020).

For small and medium-sized enterprises (SMEs), e-commerce adoption can help them continue operations and reach a broader customer base, especially amid the pandemic. Digitization plays a crucial role in enabling SMEs to adapt to the new digital landscape, streamline operations, improve efficiency, and reduce costs. Policymakers and stakeholders should prioritize e-commerce adoption among SMEs and provide support for digitization to help businesses thrive post-pandemic (Akpan, Ibidunni 2021). Automation and digitization have enhanced the efficiency and speed of e-commerce operations, leading to faster delivery times and improved customer satisfaction.











2023

15-16th June

The continued development of digital technologies is expected to further fuel the growth of e-commerce adoption (Axman, Kročová 2019). In the case of SMEs in Pakistan, factors like organizational readiness, perceived usefulness and ease of use, external pressure, and government support influence e-commerce adoption. Understanding these factors and the role of digitization can help SMEs make informed decisions and successfully transition to online platforms (Chaudhuri, Kumar 2015; Chowdhury et al. 2021).

Study background

The literature review focuses on the importance of e-commerce adoption for businesses, particularly in the context of the COVID-19 pandemic. It explores the factors that influence the adoption of e-commerce and its impact on business performance. The review identifies organizational readiness, external pressures, and perceived benefits as key factors affecting e-commerce adoption. Organizational readiness includes factors such as IT infrastructure, organizational culture, and employee readiness, while external pressures encompass competition and government regulations.

Perceived benefits of e-commerce adoption include increased sales and customer reach. The review also highlights that e-commerce adoption has a positive impact on business performance, leading to increased sales, profitability, and customer satisfaction. Small and medium-sized enterprises (SMEs) are especially likely to benefit from e-commerce adoption due to enhanced customer reach and reduced transaction costs. However, challenges remain, including the lack of digital skills and resources, concerns about security and privacy, and the high initial investment required. Overcoming these challenges is crucial for businesses to fully harness the benefits of e-commerce adoption and maintain competitiveness in the modern market (Cuellar-Fernández et al. 2021).

The e-commerce adoption frameworks commonly used in research: the Diffusion of Innovation (DOI) framework and the Technology Acceptance Model (TAM). The DOI framework focuses on factors like relative advantage, compatibility, complexity, trialability, and observability, which influence the adoption of new technology. Studies applying this framework have found that factors such as perceived relative advantage, compatibility, complexity, trialability, and observability play a role in e-commerce adoption.

Perceived usefulness and perceived ease of use are the key factors in the TAM framework, and studies consistently show their significance in predicting e-commerce adoption. Both frameworks have been widely used to understand e-commerce adoption and identify important factors for adoption, such as perceived usefulness, perceived ease of use, relative advantage, and compatibility. Future research can explore the relationship between these factors and other constructs to gain a deeper understanding of e-commerce adoption in different contexts.

The two key factors that influence e-commerce adoption: technological factors and organizational factors. Technological factors include a company's technological readiness, user experience, security measures, mobile accessibility, and technology infrastructure. Companies that are more technologically advanced are more likely to adopt e-commerce, as it requires significant investment in technology. A positive user experience, secure payment systems, mobile compatibility, and robust technology infrastructure are crucial for encouraging e-commerce adoption.

Organizational factors, such as organization size, culture, leadership support, and available resources, also play a role in e-commerce adoption. Smaller organizations are more likely to adopt e-commerce due to the cost savings and increased efficiency it offers. Organizational culture that values innovation and risk-taking, leadership support for e-commerce adoption, and adequate resources for investment are important factors in promoting e-commerce adoption.

Both technological and organizational factors need to be considered by businesses to enhance their e-commerce adoption and effectively integrate it into their operations.











202315-16th June

Research outline

The summary describes the research design and topic of a study focused on the need-based e-commerce adoption for small and medium-sized enterprises (SMEs) in the context of Pakistan and Bangladesh after the COVID-19 pandemic.

The study aims to examine how digitization, as a moderator, influences the adoption of e-commerce by SMEs in these countries. The COVID-19 pandemic had a significant impact on SMEs, leading them to transform their businesses by utilizing online platforms for improved consumer access, timely product delivery, and cashless payment options. The pandemic also affected the mental health of people, workers, and managers in SMEs globally. Government-mandated COVID-19 protocols encouraged consumers to make online purchases, benefiting existing online platforms. Digitization, involving the storage of data online through websites and social media platforms, became crucial for SMEs to reduce product delivery costs, provide anytime access to consumers, and navigate government restrictions related to the pandemic. Based on the previous studies, the research set five hypotheses as follows:

- H1. evaluates a positive relationship between the need-based factors and digitization in the adoption of e-commerce in SMEs of Pakistan and Bangladesh after the COVID-19 pandemic.
- H2. External environmental factors In Pakistan increased e-Commerce adoption more than in Bangladesh after the Covid-19 pandemic.
- H3. Need-based factors In Bangladesh increased for e-Commerce adoption than in Pakistan after the Covid-19 pandemic.
- H4. Organizational Factors in Bangladesh increased e-Commerce adoption than in Pakistan after the Covid-19 Pandemic.
- H5. Technological Factors in Pakistan increased e-Commerce adoption more than in Bangladesh after the Covid-19 Pandemic.

The summary highlights the findings and conclusions from the study on need-based e-commerce adoption for SMEs in Pakistan and Bangladesh after the COVID-19 pandemic. The study emphasizes the importance of e-commerce adoption for SMEs to overcome challenges and adapt to the new normal. It is found that there is a strong positive relationship between digitization and e-commerce adoption in both countries, indicating that SMEs can leverage digital technologies to enhance their capabilities and improve market reach, operations, and efficiency.

The study also identifies the significance of need-based factors and digitization in influencing e-commerce adoption. External environmental factors were found to have a significant impact on e-commerce adoption in Bangladesh but an insignificant impact in Pakistan, likely due to the economic crisis faced by Pakistan.

The study suggests that policymakers and industry associations should invest in digital infrastructure, promote digital literacy, and create a supportive regulatory environment to facilitate e-commerce adoption among SMEs. It is important for SMEs to establish an online presence, streamline operations using digital technologies, and leverage digital innovations to meet changing customer needs.

Additionally, the study discusses the role of organizational factors and technological factors in e-commerce adoption. Organizational factors were found to have a significant relationship with e-commerce adoption in Bangladesh, while the relationship was weaker in Pakistan. Technological factors were found to have a significant relationship with e-commerce adoption in both countries. The comparative analysis reveals that Bangladesh has made more progress in digitization and e-commerce adoption compared to Pakistan, attributed to its better economic stability and digitization efforts.

Conclusion

In conclusion, SMEs in Pakistan and Bangladesh need to adopt need-based e-commerce solutions to thrive in the post-pandemic era. Digitization serves as a crucial moderator for e-commerce adoption,













2023

15-16th June

and policymakers, industry associations, and SMEs themselves should collaborate to facilitate the adoption process. The economic condition, organizational factors, technological factors, and external environment play important roles in determining the success of e-commerce adoption in both countries, with Bangladesh showing more favourable conditions for adoption compared to Pakistan.

Literature

- 1. Abualrob, A. A., Kang, J. (2016), The barriers that hinder the adoption of e-commerce by small businesses: Unique hindrance in Palestine. "Information Development", 32(5), 1528-1544.
- 2. Adam, I. O., Alhassan, M. D., Afriyie, Y. (2020), What drives global B2C E-commerce? An analysis of the effect of ICT access, human resource development and regulatory environment." Technology Analysis & Strategic Management", 32(7), 835-850.
- 3. Akpan, I. J., Ibidunni, A. S. (2021), *Digitization and technological transformation of small business for sustainable development in the less developed and emerging economies: a research note and call for papers.* "Journal of Small Business & Entrepreneurship", 1-7.
- 4. Axman, M., Kročová, Š. (2019), Safety of technical infrastructure in crisis situations. International Multidisciplinary Scientific GeoConference: SGEM, 19(3.1), 481-488.
- 5. Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., Naqvi, M. B. (2020), *E-commerce trends during COVID-19 Pandemic. International Journal of Future Generation* "Communication and Networking", 13(2), 1449-1452.
- 6. Chaudhuri, P., Kumar, A. (2015), Role of digitization and e-commerce in Indian economic growth: an employment generation perspective. Conference: 98th Annual Conference of Indian Economic Association
- 7. Chowdhury, M. S. A., Akter, S., Chowdhury, M. M., Ahsan, S. M. H., Arafat, A. Y. (2021), *Is COVID-19 a Blessing for Ecommerce: A View from Bangladesh*. Global "Journal of Management and Business Research", 21(B2), 17-21.
- Cuellar-Fernández, B., Fuertes-Callén, Y., Serrano-Cinca, C. (2021), Survival of e-commerce entrepreneurs: The importance of brick-and-click and internationalization strategies. "Electronic Commerce Research and Applications", 46, 101035.







