

RESEARCH ARTICLE

EXPLORING THE IMPACT OF DIGITALIZATION ON BUSINESS OPERATIONS: PERSPECTIVES FROM SMES IN BANGLADESH

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ABSTRACT

This qualitative research investigates the impact of digitalization on small and medium-sized enterprises (SMEs) in Bangladesh, a country with a burgeoning SME sector pivotal to its economic growth. Digitalization, characterized by the integration of digital technologies into business operations, has become increasingly relevant in the global context, reshaping traditional business paradigms and fostering innovation. Against this backdrop, this study aims to explore how SMEs in Bangladesh navigate the digital landscape, examining the challenges, opportunities, strategies, and implications of digitalization for their operations. Through in-depth interviews with 20 SME owners and managers representing diverse industries and regions within Bangladesh, this research delves into the complexities and nuances of digital transformation in the Bangladeshi SME context. Thematic analysis of the interview data reveals a range of insights into the adoption, challenges, and outcomes of digitalization for SMEs. Key themes include digital transformation strategies, encompassing initiatives such as e-commerce adoption, digital marketing, and data-driven decision-making; challenges and barriers, including limited digital literacy, infrastructure constraints, and cybersecurity risks; opportunities and innovations, such as market expansion, innovation, and collaboration; and implications for policy and support, emphasizing the need for supportive government policies, industry initiatives, and capacity-building programs. The findings of this study contribute to a deeper understanding of the dynamics of digitalization and SMEs in Bangladesh, offering valuable insights for policymakers, industry stakeholders, and support organizations. By addressing the challenges and leveraging the opportunities presented by digitalization, SMEs in Bangladesh can enhance their competitiveness, innovation, and resilience, driving economic growth and sustainable development in the country. This research underscores the importance of fostering an enabling environment that empowers SMEs to thrive in the digital age, ensuring inclusive growth and prosperity for all segments of society.

KEYWORDS

Digitalization, SMEs, Bangladesh, Qualitative Research, Challenges, Opportunities, Policy Implications

1. INTRODUCTION

Digitalization has become a powerful force that is changing corporate environments globally, completely transforming how organizations function, communicate, and vie for success. The fast progress of digital technology is causing significant changes in the operating methods of firms in several industries. This is disrupting established business models and promoting innovation at an unprecedented speed (Favoretto et al., 2022). The influence of digitization on company operations is of great interest in Bangladesh, a country known for its thriving small and medium-sized enterprise (SME) sector. Small and medium-sized enterprises (SMEs) have a significant impact on promoting economic growth, creating job opportunities, and reducing poverty in Bangladesh (Bagale et al., 2021). Hence, comprehending how these businesses manoeuvre across the digital terrain is crucial for promoting sustainable growth and competitiveness in the international market.

The digitization of company processes involves several technologies such as cloud computing, data analytics, artificial intelligence (AI), Internet of Things (IoT), and blockchain, among others (Emon et al., 2023; Su et al., 2023). These technologies help small and medium-sized enterprises (SMEs) in optimising their operations, increasing efficiency, enhancing

customer interaction, and entering new markets. Nevertheless, the incorporation and assimilation of digital technology into small and medium-sized enterprise (SME) activities are not devoid of obstacles. Various obstacles, including low levels of digital literacy, insufficient infrastructure, exorbitant expenses, and cybersecurity threats, provide substantial challenges to the process of digitalization for numerous small and medium-sized enterprises (SMEs) in Bangladesh (Nazir and Roomi, 2020). Furthermore, the COVID-19 pandemic has expedited the need for small and medium-sized enterprises (SMEs) to adopt digitalization as a strategy for resilience and adjustment to swiftly evolving market dynamics (Bagale et al., 2021; Bermeo-Giraldo et al., 2022).

In light of this context, this qualitative study aims to investigate the influence of digitalization on business activities as seen by small and medium-sized enterprises (SMEs) in Bangladesh. This study seeks to enhance our knowledge of the process of digitalization in the context of small and medium-sized enterprises (SMEs) in Bangladesh. It attempts to achieve this by analysing the experiences, problems, possibilities, and strategies of SME owners and managers in adopting and using digital technology. By conducting extensive interviews and analysing themes, valuable insights will be obtained to provide guidance to policymakers, industry stakeholders, and support organizations. These insights will help

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them develop effective strategies to enable the digital transformation of small and medium-sized enterprises (SMEs) and fully harness their potential in promoting economic growth and enhancing competitiveness. The research has great importance as it has the ability to provide valuable insights for evidence-based policies and activities that aim to promote digitalization among small and medium-sized enterprises (SMEs) in Bangladesh.

In light of the growing digitalization of the global economy, it is crucial for Bangladesh to seize the potential offered by digital technology, while also tackling the specific obstacles encountered by its small and medium-sized enterprises (SMEs). By equipping small and medium-sized enterprises (SMEs) with the necessary tools, skills, and resources to adopt digitalization, Bangladesh can improve its ability to compete, encourage innovation, and provide a favourable climate for long-term economic growth. Recently, the Bangladeshi government has acknowledged the significance of digitalization in fostering economic growth and has implemented several measures to encourage digital entrepreneurship and innovation. The Digital Bangladesh Vision 2021 seeks to utilize digital technology to convert Bangladesh into a society based on knowledge and a country with a middle-income status by 2021 (Government of Bangladesh, 2018). The Access to Information (a2i) programme, developed in partnership with the United Nations Development Programme (UNDP), has played a crucial role in promoting digital transformation in several sectors, including small and medium-sized enterprises (SMEs) (a2i, n.d.). These efforts highlight the government's dedication to creating a supportive atmosphere for digital innovation and entrepreneurship in Bangladesh (Emon and Nipa, 2024).

Nevertheless, despite these endeavours, notable obstacles continue to exist in the process of digitalizing small and medium-sized enterprises (SMEs) in Bangladesh. Insufficient availability of funds, poor digital infrastructure, and a shortage of qualified workforce continue to be significant obstacles to the adoption and integration of digital technologies (Simić et al., 2020). Moreover, the disparity in access to digital technology and opportunities is worsened by the digital gap between urban and rural regions, which presents obstacles for initiatives to promote inclusive digitalization (Peredy and Feierzhati, 2023). To tackle these difficulties, a comprehensive strategy is needed that involves cooperation among government agencies, industrial groups, academics, and civil society organizations.

The COVID-19 pandemic has emphasized the crucial significance of digitization in ensuring the continuity and resilience of businesses. Small and medium-sized enterprises (SMEs) who had previously used digital technology were more prepared to adjust to remote working, online sales channels, and digital payment methods. This helped them minimize the negative effects of the pandemic on their business operations (Jahankhani et al., 2022). Nevertheless, several small and medium-sized enterprises (SMEs) had substantial difficulties in the process of digitizing their operations because to the interruptions produced by the pandemic. This highlights the importance of implementing specific assistance and capacity-building programmes (Emon and Nahid, 2023; Wang et al., 2018). As Bangladesh strives to overcome the socio-economic consequences of the pandemic, the process of digitization will have a crucial role in facilitating a more robust recovery and promoting equitable economic growth.

2. LITERATURE REVIEW

The literature on digitization and its influence on company operations offers a diverse range of insights into the complex nature of this phenomena. Researchers have examined several aspects of digitalization, including theoretical frameworks and empirical investigations, to understand its impact on small and medium-sized firms (SMEs) globally. In Bangladesh, where small and medium-sized enterprises (SMEs) play a major role in the economy, it is essential to comprehend the consequences of digitization in order to promote economic growth, innovation, and competitiveness. Digitalization is the incorporation of digital technology into many areas of corporate operations, such as manufacturing, marketing, distribution, and customer service (Jahankhani et al., 2022). The term "digital transformation" refers to the adoption and integration of several advanced technologies such as cloud computing, data analytics, artificial intelligence (AI), Internet of Things (IoT), and blockchain (Emon, 2023; Wang et al., 2018).

By adopting and integrating these technologies, organizations may optimise their operations, improve efficiency, and provide novel value propositions for consumers. Within the realm of small and medium-sized enterprises (SMEs), the process of digitalization has significant potential for revolutionising conventional business models and revealing fresh avenues for growth. Studies indicate that small and medium-sized

enterprises (SMEs) that use digital technology often achieve greater levels of productivity, innovation, and competitiveness in comparison to SMEs that do not utilize digital technologies (Vergragt et al., 2016). Through the use of digital tools and platforms, small and medium-sized enterprises (SMEs) may enhance their operational efficiency, save expenses, and reach untapped markets that extend beyond geographical limitations (Eliakis et al., 2020). Multiple studies have recorded the advantages of digitalization for small and medium-sized enterprises (SMEs) in various industries and geographic areas.

A study conducted demonstrates the ability of digital technology to help small and medium-sized enterprises (SMEs) in Bangladesh overcome conventional obstacles to entering the market and expand their reach to a worldwide customer base by using e-commerce platforms (Richter et al., 2017). In a similar vein, discovered that small and medium-sized enterprises (SMEs) who allocate resources towards digitization see enhancements in customer interaction, product quality, and supply chain management (Chowdhury, 2017). Furthermore, digitization improves the capacity of small and medium-sized enterprises (SMEs) to adjust to evolving market dynamics and consumer preferences. According to a research conducted, small and medium-sized enterprises (SMEs) in Bangladesh that used digital technology were more capable of adapting their business models and offers in response to the COVID-19 epidemic (Islam et al., 2021).

SMEs were able to sustain their operations throughout lockdowns and social distancing measures by utilizing digital technologies such as online marketplaces, digital payment systems, and remote collaboration platforms. Although there are potential advantages, small and medium-sized enterprises (SMEs) encounter many obstacles when it comes to adopting and using digital technology into their business processes. A significant obstacle faced by small and medium-sized enterprise (SME) owners and staff is their limited proficiency and expertise in digital literacy (Choudhury and Sabur, 2021).

A significant number of small and medium-sized enterprises (SMEs) in Bangladesh have a shortage of technical knowledge and resources required to efficiently use digital tools and platforms, resulting in the underutilization of existing technology. Insufficient digital infrastructure is a major obstacle to the digitization of small and medium-sized enterprises (SMEs) in Bangladesh. The lack of dependable internet connectivity, energy, and hardware equipment is a significant obstacle for SMEs to use cloud-based services, e-commerce platforms, and digital communication tools (Akter et al., 2020). In addition, small and medium-sized enterprises (SMEs) are confronted with significant cybersecurity problems, including the potential for data breaches, malware attacks, and ransomware threats (Khan et al., 2021).

In light of the significance of digitalization in fostering the growth and competitiveness of small and medium-sized enterprises (SMEs), the government of Bangladesh has implemented a range of policies and assistance programmed aimed at fostering digital entrepreneurship and innovation. The Digital Bangladesh Vision 2021, initiated in 2009, seeks to utilize digital technology to convert Bangladesh into a society based on knowledge and elevate it to the status of a middle-income country (Government of Bangladesh, 2018). In accordance with this perspective, the government has adopted many initiatives to improve digital infrastructure, encourage digital literacy, and streamline e-government services. Additionally, the Access to Information (a2i) programme, which was initiated in partnership with the United Nations Development Programme (UNDP), has played a crucial role in facilitating the adoption of digital technology in many industries, including small and medium-sized enterprises (SMEs) (a2i, n.d.). The a2i programme seeks to empower SMEs by providing capacity-building initiatives, training programmes, and access to digital services.

This enables SMEs to embrace digitalization and improve their competitiveness. Sustainable entrepreneurship is actively seeking out company possibilities that create economic, social, and environmental benefits (Emon and Khan, 2023). Within the realm of small and medium-sized enterprises (SMEs), the process of digitization presents chances to incorporate sustainability concepts into company practices and develop inventive solutions to address social problems. Recent research has highlighted the significance of digital technologies, including IoT, AI, and blockchain, in promoting sustainable habits and generating favourable social and environmental results (Hasan Emon et al., 2023). IoT-enabled sensors have the capability to monitor energy usage, optimise resource utilisation, and minimize the environmental effect on industrial processes (Jahankhani et al., 2022).

Furthermore, the implementation of blockchain technology may augment the level of transparency, traceability, and ethical sourcing within the

supply chain. This, in turn, can have a positive impact on the promotion of sustainable production and consumption patterns (Wang et al., 2018). Entrepreneurs have a crucial role in spearheading the process of digitization and fostering innovation inside small and medium-sized enterprises (SMEs). Research has emphasized the significance of entrepreneurial approach, mentality, and talents in effectively utilizing digital technology to achieve corporate development and long-term viability (Vergragt et al., 2016). Digital entrepreneurship involves recognising and taking use of digital possibilities by creating new and inventive business models, goods, and services (Eliakis et al., 2020). Entrepreneurs in Bangladesh have distinct obstacles and prospects when it comes to using digital technology. These issues arise from variables such as restricted financial access, insufficient infrastructure, and talent deficiencies (Richter et al., 2017).

Nevertheless, resourceful entrepreneurs have proven their capacity to surmount these obstacles by employing ingenuity, flexibility, and cooperation (Chowdhury, 2017). By adopting digitalization, entrepreneurs in Bangladesh may access new market possibilities, improve productivity, and contribute to sustainable economic growth. Investments in training and skill development are crucial for improving employee performance and increasing the competitiveness of an organization (Hasan and Chowdhury, 2023). Training programmes are essential in the digitalization environment since they provide employees with the necessary knowledge, skills, and competencies to properly use digital technology. Training programmes focused on digital marketing, data analytics, and e-commerce can enable staff to effectively utilize digital technology to drive corporate success and foster innovation. SMEs may improve employee engagement, job happiness, and organizational effectiveness in the digital era by investing in specific training programmes.

The impression of service quality is crucial in influencing customer happiness, loyalty, and brand reputation (Emon et al., 2023). The digital era has brought about technological breakthroughs that have revolutionized the way customers engage with organizations, resulting in the emergence of new expectations and preferences for service delivery. Mobile applications, chatbots, and social media platforms are becoming essential means of providing services and interacting with clients in real-time. Nevertheless, ensuring the excellence of service in digital settings has distinctive obstacles concerning privacy, security, and data safeguarding. Recent research has investigated the influence of digitalization on how service quality is perceived in many sectors, such as banking, healthcare, and retail.

3. RESEARCH METHODOLOGY

The research methodology employed for this qualitative study involved a systematic approach to data collection and analysis, aimed at exploring the impact of digitalization on business operations from the perspectives of SMEs in Bangladesh. A purposive sample strategy was employed to recruit individuals who could offer comprehensive and varied views on the research issue. The objective was to include a diverse range of experiences and opinions by specifically focusing on small and medium-sized enterprise (SME) owners and managers from different industries and areas across Bangladesh. The sample size for this qualitative study was 20 people. This size was considered adequate to reach data saturation, a point at which no new themes or insights arose from further interviews, providing thorough coverage of the study issue.

In addition, the inclusion of participants from various industrial sectors, geographical areas, and firm sizes enhanced the quality and comprehensiveness of the collected data. The major technique of data collecting was conducting in-depth interviews. Interview guides were created to enable in-depth conversations with participants, providing an opportunity to delve into their experiences, difficulties, possibilities, and approaches to the implementation of digitalization in their enterprises. The interviews were performed either in person or by remote means, depending on the preferences and availability of the participants. Each interview session had a duration of around 60 to 90 minutes and was recorded using audio technology with the participants' permission to guarantee precise data collection. The interview data was analysed using thematic analysis, which involved a systematic and iterative approach.

The audio recordings were transcribed word for word, and the resulting transcripts were subsequently integrated into qualitative analytic software for the purpose of categorising and developing themes. At first, open coding was performed to discern patterns, concepts, and reoccurring themes within the data. Codes were created by an inductive process that took into account the content of the transcripts. This approach allowed for adaptability and the ability to identify new themes. Following that, the codes were systematically categorised into more general themes and sub-

themes by continuously comparing and improving them. An analysis was conducted to explore the relationships between codes, and overarching patterns were established to encapsulate the intricate and subtle aspects of the individuals' experiences with digitalization.

In order to guarantee the reliability and thoroughness of the investigation, many procedures were implemented. Triangulation was accomplished by gathering data from many sources, such as conducting interviews with subject matter experts (SME) who are owners and managers, and also by referring to additional papers and reports that are relevant to the digitization efforts in Bangladesh. Member verification was performed by presenting initial findings to specific participants in order to verify the correctness and interpretation of their replies. In addition, colleagues with expertise in qualitative research were consulted through peer debriefing sessions to evaluate coding judgements and improve reflexivity. The research method adhered to ethical norms.

Prior to conducting interviews, all participants were provided with informed consent, and their confidentiality and anonymity were maintained throughout the study. Participants were guaranteed the freedom to withdraw from the study at any point without facing any negative consequences. There are some constraints that need to be acknowledged in this investigation. Initially, the research exclusively concentrated on small and medium-sized enterprises (SMEs) in Bangladesh, which restricts the applicability of the results to different situations. Furthermore, the study depended on data provided by participants themselves, which might potentially be influenced by biases and mistakes. Ultimately, the utilisation of qualitative methods may have limited the extent and scope of the investigation in comparison to quantitative procedures.

4. RESULTS AND FINDINGS

The analysis of data gathered from in-depth interviews with 20 SME owners and managers in Bangladesh revealed a range of insights into the impact of digitalization on their business operations. Through thematic analysis, several key themes and findings emerged, shedding light on the challenges, opportunities, strategies, and implications of digitalization for SMEs in the country.

4.1 Digital Transformation Strategies

One prominent theme that emerged from the interviews was the adoption of digital transformation strategies by SMEs. Participants described various initiatives aimed at integrating digital technologies into different aspects of their operations, including marketing, sales, supply chain management, and customer service. For instance, several participants mentioned investing in e-commerce platforms to reach a wider customer base and expand their market presence. One participant stated, "We launched our own online store to sell our products directly to customers, bypassing traditional distribution channels." Similarly, digital marketing was highlighted as a key strategy for enhancing brand visibility and customer engagement. Participants discussed the use of social media platforms, email marketing, and search engine optimization (SEO) to attract and retain customers. One participant noted, "We leverage social media ads and influencer partnerships to promote our products and engage with our target audience effectively." Moreover, participants emphasized the importance of data-driven decision-making in guiding their digital transformation efforts. By leveraging analytics tools and customer data, SMEs were able to gain insights into consumer behavior, market trends, and product preferences. This enabled them to tailor their offerings and marketing strategies to meet the evolving needs of their customers. As one participant explained, "We use data analytics to track sales trends, identify high-demand products, and optimize our inventory management."

4.2 Challenges and Barriers

Despite the benefits of digitalization, SMEs in Bangladesh faced several challenges and barriers in adopting and leveraging digital technologies. Limited digital literacy and skills among employees were cited as significant obstacles, with many SMEs lacking the expertise needed to effectively utilize digital tools and platforms. Participants expressed the need for training programs and capacity-building initiatives to enhance digital skills within their organizations. One participant remarked, "We struggle with a lack of skilled manpower who can handle digital marketing and e-commerce operations effectively. Training programs would be beneficial in addressing this gap." In addition, participants highlighted infrastructure limitations as a key challenge, particularly in rural areas where access to reliable internet connectivity and electricity was scarce.

This hindered SMEs' ability to fully leverage cloud-based services, online marketplaces, and digital communication tools. Participants called for

government intervention to improve digital infrastructure and expand internet access to underserved areas. As one participant stated, "We need better internet connectivity and electricity infrastructure to support our online operations. The government should prioritize investment in digital infrastructure to bridge the urban-rural divide." Cybersecurity concerns were also raised as a significant barrier to digitalization for SMEs. Participants expressed fears of data breaches, malware attacks, and identity theft, highlighting the need for robust cybersecurity measures to protect their business assets and customer information. Some participants mentioned investing in cybersecurity solutions and regularly updating their software to mitigate risks. However, others felt overwhelmed by the complexity and cost of cybersecurity measures. One participant said, "Cybersecurity is a major concern for us, but it's also a daunting challenge. We need affordable and user-friendly solutions that can safeguard our business from cyber threats."

Challenges and Barriers	Description
Limited Digital Literacy	SMEs lack the expertise and skills needed to effectively utilize digital tools and platforms.
Infrastructure Limitations	Limited access to reliable internet connectivity and electricity hinders SMEs' ability to leverage digital technologies.
Cybersecurity Concerns	SMEs face risks of data breaches, malware attacks, and identity theft, leading to concerns about the security of their business assets and customer information.

Source: Developed by Author from Interview

4.3 Opportunities and Innovations

Despite the challenges, SMEs in Bangladesh identified several opportunities and innovations stemming from digitalization. Participants highlighted the potential for expanding market reach and accessing new customer segments through online channels. E-commerce platforms, social media, and mobile apps were cited as effective tools for reaching customers beyond traditional geographical boundaries. Participants expressed optimism about the growth prospects afforded by digitalization, with one participant stating, "Digital technologies have opened up new avenues for us to reach customers nationwide and even globally. We're excited about the possibilities for expansion and growth." Moreover, digitalization was seen as a catalyst for innovation and entrepreneurship, enabling SMEs to develop new products, services, and business models.

Participants shared examples of digital innovations such as mobile payment solutions, IoT-enabled devices, and AI-powered chatbots that enhanced their competitiveness and differentiation in the market. One participant described how their company developed a mobile app to facilitate online ordering and payment for customers, thereby streamlining the purchasing process and enhancing user experience. Furthermore, participants highlighted the role of digital platforms and ecosystems in fostering collaboration and partnerships among SMEs. Online marketplaces, industry forums, and social networks provided avenues for SMEs to network, share knowledge, and access resources. Participants emphasized the importance of building strategic partnerships and leveraging digital ecosystems to drive innovation and growth. As one participant noted, "Collaboration is key in the digital age. By partnering with other SMEs and tech companies, we can pool our resources, share expertise, and create value for our customers."

Opportunities and Innovations	Description
Market Expansion	Digital technologies enable SMEs to reach customers beyond traditional geographical boundaries through online channels such as e-commerce platforms and social media.
Innovation and Entrepreneurship	Digitalization fosters innovation and entrepreneurship among SMEs, leading to the development of new products, services, and business models.
Collaboration and Partnerships	Digital platforms and ecosystems provide opportunities for SMEs to collaborate, share resources, and create value through strategic partnerships.

Source: Developed by Author from Interview

4.4 Implications for Policy and Support

The findings underscored the importance of supportive policies and initiatives to facilitate the digital transformation of SMEs in Bangladesh. Participants called for government intervention in areas such as digital infrastructure development, skills training, and cybersecurity regulation. They emphasized the need for targeted support programs tailored to the unique needs and challenges of SMEs, particularly those in rural and underserved areas. One participant suggested, "The government should provide incentives and subsidies to SMEs for investing in digital technologies. This would help offset the costs and encourage more businesses to embrace digitalization." Moreover, participants emphasized the role of industry associations, academic institutions, and civil society organizations in providing guidance, mentorship, and networking opportunities for SMEs embarking on their digital journey. They highlighted the importance of knowledge-sharing platforms, training workshops, and funding schemes to support SMEs in their digitalization efforts. As one participant stated, "We need more support from industry associations and universities in terms of training and mentorship. They can play a vital role in building digital capabilities and fostering innovation among SMEs."

Implications for Policy and Support	Description
Government Intervention	Policymakers should intervene in areas such as digital infrastructure development, skills training, and cybersecurity regulation to support SMEs in their digitalization efforts.
Industry and Academic Support	Industry associations, academic institutions, and civil society organizations can provide guidance, mentorship, and networking opportunities for SMEs embarking on their digital journey.
Incentives and Subsidies	The government should provide incentives and subsidies to SMEs for investing in digital technologies to offset costs and encourage more businesses to embrace digitalization.

Source: Developed by Author from Interview

5. DISCUSSION

The discussion part explores the consequences of the study results, situates them within the wider body of literature, and provides valuable insights into their importance for policymakers, industry stakeholders, and support organizations. The results highlight the complex and diverse effects of digitalization on the operations of small and medium-sized enterprises (SMEs) in Bangladesh. Although small and medium-sized enterprises (SMEs) have the potential to gain advantages in terms of improved efficiency, expanded market access, and enhanced creativity through digitization, they also encounter notable obstacles related to limited digital skills, infrastructure constraints, and vulnerabilities to cybersecurity threats.

The results align with previous research that emphasises the intricate and subtle nature of digital transformation for small and medium-sized enterprises (SMEs) worldwide (Ahmed and Chowdhury, 2020; Khan et al., 2021; Schneider, 2021). To tackle the issues outlined in this study, it is necessary to have a synchronised endeavour including all stakeholders. Policymakers have a vital responsibility in establishing a favourable atmosphere for digital entrepreneurship and innovation. This involves investing in digital infrastructure, offering incentives for digital adoption, and developing legislative frameworks that are supportive in nature (Government of Bangladesh, 2018). In addition, industry groups, academic institutions, and civil society organizations can participate in capacity-building initiatives, knowledge-sharing platforms, and mentoring programmes to assist small and medium enterprises (SMEs) in their process of digitization (a2i, n.d.). Digitalization presents SMEs in Bangladesh with possibilities and innovations that can lead to development, competitiveness, and resilience.

SMEs may overcome conventional obstacles to entering the market, broaden their client base, and distinguish themselves in the marketplace by utilizing digital technology (Choudhury and Sabur, 2021). Moreover, digitalization promotes a culture of innovation and entrepreneurship, stimulating the creation of novel goods, services, and business models that cater to the changing demands of customers (Islam et al., 2021). Collaboration and partnerships are essential factors that promote digitalization for small and medium-sized enterprises (SMEs). They allow SMEs to combine resources, exchange knowledge, and jointly generate value (Aker et al., 2020).

Digital platforms and ecosystems facilitate the connection, cooperation, and access to support networks for small and medium-sized enterprises (SMEs), promoting a culture of collaboration and information exchange within the SME community (Chesbrough and Rosenbloom, 2002). However, in order to fully harness the benefits of digitalization for small and medium enterprises (SMEs) in Bangladesh, it is necessary to bridge the gap in digital access between urban and rural regions and ensure that digital technologies and opportunities are accessible to all (Khan et al., 2021). Furthermore, it is crucial to prioritise initiatives aimed at improving digital literacy, skill acquisition, and cybersecurity awareness among small and medium-sized enterprises (SMEs) in order to strengthen their digital capacities and resilience (Kshetri, 2020).

6. CONCLUSION

This study offers significant insights into the effects of digitalization on small and medium-sized firms (SMEs) in Bangladesh. The findings emphasise the potential advantages and difficulties involved in the process of digital transformation for small and medium-sized enterprises (SMEs). They provide insights into the intricacies and subtleties of navigating the digital environment in a developing nation setting. The process of digitalization presents small and medium-sized enterprises (SMEs) in Bangladesh with the opportunity to improve their competitiveness, innovation, and market expansion. Through the utilisation of digital technology, small and medium-sized enterprises (SMEs) may optimise their operations, reach untapped client groups, and create novel goods and services that cater to the changing demands of their customers. Furthermore, the process of digitization promotes a culture of cooperation, alliance, and exchange of information among small and medium-sized enterprises (SMEs), allowing them to jointly generate value and stimulate economic expansion. Nevertheless, small and medium-sized enterprises (SMEs) have substantial obstacles when it comes to embracing and using digital technology into their business processes. The lack of digital skills, inadequate infrastructure, and the presence of cybersecurity threats are significant obstacles to the complete utilisation of digitalization, impeding small and medium-sized enterprises (SMEs) from completely capitalising on the advantages of digital transformation. To tackle these difficulties, it is necessary for policymakers, industry stakeholders, and support organizations to work together in a coordinated manner. This collaboration aims to establish a conducive climate that promotes digital entrepreneurship, innovation, and inclusive economic expansion. In order to address the disparity in access to digital resources between urban and rural regions, it is crucial to make collaborative and focused endeavours. These efforts should aim to improve the knowledge and proficiency in using digital technologies and promote the development of skills. Additionally, it is important to raise awareness about cybersecurity among small and medium-sized enterprises (SMEs). Furthermore, it is crucial to establish specific policies, programmes, and interventions that will assist small and medium-sized enterprises (SMEs) in their process of transitioning to digital platforms. This will guarantee that all businesses are able to keep up with the advancements of the digital era.

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