



University of Wales
Trinity Saint David

An Assignment of
Linking organizational performance and digital technology: the RBV study of SME in
Bangladesh

Module name: Converting research into practice

Module code: LCDB7010_LON

Submitted To

Dr Amare Desta

Submitted By

Name: Sanjida Akther Eva

Student ID: 2510973

Term: 2

Doctor of Business Administration

Linking organizational performance and digital technology: the RBV study of SME in Bangladesh

Abstract

This study examines the relationship among digital technology and organisational performance in small and medium-sized enterprises (SMEs) in Bangladesh, with a particular be centred on the role of internal capabilities from a Resource-Based View (RBV) perspective. In today's digital environment, digital technologies like cloud computing, data analytics, and digital platforms are transforming how SMEs function, compete, and create value, offering opportunities to improve efficiency, enhance customer engagement, and expand market reach. However, existing research demonstrates that the impact of digital technology on organisational performance is not always consistent, as many firms fail to achieve expected outcomes despite adopting digital tools. To address this issue, the study adopts a mixed-method, quantitative data collected through a structured questionnaire from 31 SME respondents with qualitative insights from open-ended responses. Descriptive statistics used in quantitative data analysis, particularly frequencies and percentages, and thematic also used for systematically analysis qualitative data to identify recurring patterns and key themes. The findings indicate that SMEs demonstrate a moderate to high level of digital technology adoption, particularly in communication tools, cloud systems, and enterprise platforms, but performance improvements depend largely on the presence of internal capabilities such as employee skills, managerial support, and effective organisational processes. In addition, the study identifies several key challenges, including skill gaps, cost constraints, integration issues, cybersecurity concerns, and infrastructure limitations, which restrict the effective use of digital technologies, particularly in a developing country context. The results highlight that digital technology alone is insufficient to drive organisational performance, and that firms must develop strong internal capabilities to fully leverage digital tools and achieve sustainable growth. Overall, This study makes a substantive contribution to the literature by delivering empirical evidence from SMEs in Bangladesh and offers practical insights for managers and policymakers seeking to improve digital capability and organisational performance.

Keyword: Digital Technology; Organisational Performance; Digital Capability; Small and Medium-sized Enterprises (SMEs); Resource-Based View (RBV); Dynamic Capabilities; Digital Transformation; Developing Economies; Bangladesh; Firm Performance

Introduction

In today's business environment, digital technology plays a central role in how organisations operate and grow. For small and medium-sized enterprises, tools such as cloud systems, data analytics, and online platforms help improve efficiency, support better decision-making, and expand access to customers (Kraus et al., 2022; Seppänen et al., 2025). Accordingly, using digital technology is becoming increasingly important for SMEs that want to stay competitive and sustain their growth.

However, adopting digital technology does not always lead to better organisational performance. Recent studies show that many SMEs use digital tools but do not achieve the expected results (Almeida, 2025). This suggests that the impact of digital technology depends on more than just adoption. In many cases, firms struggle to use these technologies effectively or integrate them into their business processes.

This issue is more noticeable in developing countries like Bangladesh, where SMEs often face challenges like limited financial resources, shortage of digital skills, and weak infrastructure. These challenges make it difficult for firms to fully benefit from digital technologies. Also research highlights that internal factors such as employee skills, management support, and organisational processes are important for using digital tools successfully (Seppänen et al., 2025; Escobarragan et al., 2025).

From a theoretical perspective, this can be explained by the Resource-Based View (RBV), which suggests that firm performance depends on how well internal resources and capabilities are used. In this context, digital technology provides opportunities, but real value is created when firms have the capability to use it effectively (Kraus et al., 2022).

Therefore, this study aims to examine how digital technology and organisational performance are linked in SMEs in Bangladesh, Emphasising the role of internal capabilities. The study seeks to provide a clearer understanding of how SMEs can use digital technologies more effectively to achieve better performance and long-term growth.

Problem Statement

Digital technologies are increasingly shaping how organisations create value, compete, and grow. For SMEs, a range of digital technologies, including e-commerce platforms, cloud computing solutions, and organisational digital systems provide opportunities to improve efficiency, enhance customer engagement, and expand into wider markets (Verhoef et al., 2021; Kraus et al., 2021; Seppänen et al., 2025). As business environments continue to evolve, digital transformation has become essential for SMEs seeking to maintain strategic competitiveness and achieve sustainable growth.

However, adopting digital technology does not necessarily translate into improved organisational performance. Research shows that many SMEs invest in digital tools but fail to achieve expected outcomes, indicating that adoption alone is not enough (Vial, 2019; Warner & Wäger, 2019; Kallmuenzer et al., 2023). This suggests that the link between digital technology and performance is more complex, as it depends on how effectively these technologies are integrated into business processes.

This challenge is more evident in developing economies such as Bangladesh, where SMEs often face structural constraints, including restricted financial capacity and capability gaps in digital skills and weak infrastructure (UNCTAD, 2021). As a result, many firms remain at a basic level of digital use and struggle to translate technology adoption into meaningful performance improvements. Recent research also highlights that capability gaps continue to limit the effective use of digital technologies in SMEs (Seppänen et al., 2025).

Grounded in the Resource-Based View (RBV), digital technologies should be seen as enabling resources rather than direct sources of competitive advantage. Firm performance depends on how well internal capabilities—such as skills, knowledge, and organisational processes—are developed and used (Barney, 1991; Kraus et al., 2022). Therefore, this study examines how digital technology and organisational performance are linked in SMEs in Bangladesh, with a primary emphasis on the strategic role of internal capabilities

Research objectives

- To identify the types of digital technologies adopted by SMEs in Bangladesh

- To evaluate the impact of digital technology on organisational performance in SMEs.
- To analyse the role of firm-specific resources and capabilities in the effective utilisation of digital technologies.
- To evaluate how internal capabilities influence the link between digital technology and organisational performance.
- To explore the key challenges SMEs face in leveraging digital technologies effectively.
- To develop a conceptual framework, grounded in RBV, explaining how SMEs can achieve sustained performance through digital capability.

Research Questions

- How are digital technology and organisational performance linked in SMEs in Bangladesh?
- What types of digital technologies are adopted by SMEs in Bangladesh?
- How do firm-specific capabilities (e.g., skills, managerial support, resources) affect the use of digital technologies in SMEs?
- How do internal capabilities shape the relationship between digital technology and organisational performance?
- What challenges do SMEs face in effectively linking digital technology with organisational performance?

Significance of the Study

Digital technologies are increasingly reshaping how organisations operate, compete, and grow. For SMEs, a range of digital technologies, including e-commerce platforms, cloud-based systems, and digital payment infrastructures solutions offer new opportunities to improve efficiency, expand market reach, and enhance overall organisational performance (Bharadwaj et al., 2013; Kraus et al., 2022). The reality of many SMEs particularly is far more complex rather than developed countries in case of digital technology.

In practice, simply adopting digital technologies does not guarantee improved performance. Many SMEs invest in digital tools but fail to achieve the expected outcomes. This suggests that the relationship between digital technology and organisational performance is not straightforward. As highlighted by the Resource-Based View (RBV), competitive advantage depends not only on the availability of resources but on how effectively firms utilise their internal capabilities, such as skills, managerial expertise, and organisational

processes (Barney, 1991; Wade & Hulland, 2004). In this sense, digital technology alone is insufficient; it must be supported by firm-specific capabilities to create real value (Kallmuenzer et al., 2023).

This issue becomes even more critical in the context of Bangladesh, where SMEs operate under significant constraints. Limited financial resources, inadequate digital infrastructure, and a shortage of skilled human capital often restrict the effective use of digital technologies (UNCTAD, 2021). As a result, many SMEs remain at a basic level of digital adoption and struggle to integrate technology into their core business strategies. This creates a clear gap between technology adoption and actual performance improvement. Recent studies also highlight that capability gaps continue to limit SMEs' ability to benefit from digital transformation (Seppänen et al., 2025).

Moreover, much of the existing literature tends to focus on the direct impact of digital technology on organisational performance, often overlooking the underlying mechanisms that shape this relationship. In particular, there is limited empirical understanding of how internal capabilities influence the effectiveness of digital technologies in SMEs, especially within developing country contexts (Kraus et al., 2022). This lack of clarity makes it difficult to explain why some SMEs benefit from digital transformation while others do not.

Therefore, this study finds the gap by examining how digital technology and organisational performance are linked in SMEs in Bangladesh, with a particular focus on the role of internal capabilities as conceptualised by the Resource-Based View. By doing so, the study aims to provide a more nuanced understanding of how SMEs can move beyond simple technology adoption and develop the capabilities required to achieve sustainable performance outcomes.

Theoretical Frameworks

This study mainly uses the Resource-Based View (RBV) and also includes Dynamic Capabilities Theory as a supporting framework.

Resource-Based View (RBV): The Resource-Based View (RBV) explains that a firm's performance depends mainly on its internal resources and capabilities rather than external factors alone. In simple terms, it suggests that organisations achieve better performance when they effectively use what they already have, such as skills, knowledge, and managerial expertise. According to RBV, not all resources

create value; only those that are valuable, rare, and difficult to imitate can lead to sustained competitive advantage (Barney, 1991).

In the context of digital technology, RBV helps explain why adopting digital tools does not automatically improve organisational performance. While technologies such as e-commerce platforms, cloud systems, and digital applications provide opportunities, their impact depends on how well they are used within the organisation. This means that SMEs need strong internal capabilities—such as employee skills, leadership support, and effective processes—to turn digital technology into real performance outcomes (Bharadwaj et al., 2013; Verhoef et al., 2021).

This idea is particularly important for SMEs in developing countries like Bangladesh. Many SMEs adopt digital technologies but struggle to achieve expected results because they lack the necessary capabilities to use them effectively. As a result, there is often a gap between technology adoption and organisational performance. RBV helps explain this gap by showing that technology alone is not enough; it must be supported by internal resources and capabilities.

Therefore, in this study, RBV is used to understand how firm-specific capabilities influence the relationship between digital technology and organisational performance. It provides a foundation for explaining why some SMEs are able to benefit from digital technologies while others are not.

Dynamic Capabilities Theory (DCT):

Dynamic Capabilities Theory focuses on a firm's ability to adapt, learn, and reconfigure its resources in response to a changing environment. In simple terms, it explains how organisations adjust their strategies, processes, and skills to remain competitive over time, especially in fast-moving and uncertain conditions (Teece, 2018).

In the context of digital technology, this perspective is particularly important because digital environments are constantly evolving. SMEs are not only required to adopt digital tools but also to continuously update their capabilities to use these technologies effectively. This includes identifying new digital opportunities, integrating technologies into business operations, and modifying existing practices when necessary (Warner & Wäger, 2019).

SMEs in developing countries like Bangladesh, this ability to adapt is often constrained by restricted financial capacity and insufficient technical capabilities and inadequate infrastructure. As a result, even when digital technologies are adopted, firms may struggle to sustain performance improvements over time. This highlights the importance of developing dynamic capabilities that allow SMEs to respond to change and fully utilise digital technologies (Teece, 2018; Warner & Wäger, 2019; Li et al., 2023).

Therefore, in this study, Dynamic Capabilities Theory helps explain how SMEs develop and adjust their internal capabilities in response to digital transformation, and how this ongoing process contributes to improved organisational performance.

Literature review

Digital Technology in SMEs and RBV

Digital technology is increasingly acknowledged as a fundamental catalyst for growth and competitiveness in small and medium-sized enterprises (SMEs). Tools such as e-commerce platforms, cloud computing, and digital payment systems enable firms to improve efficiency, enhance customer engagement, and expand market reach (Kraus et al., 2021; Verhoef et al., 2021). However, the benefits of digital technology are not realised equally across all SMEs, suggesting that technology adoption alone is not sufficient to improve organisational performance.

The Resource-Based View (RBV) provides a useful explanation for this variation. It argues that firm performance depends on how effectively internal resources and capabilities are utilised, rather than on resources alone (Barney, 1991). In the context of digital transformation, this means that digital technologies must be supported by firm-specific capabilities such as technical skills, managerial expertise, and organisational processes to create value (Bharadwaj et al., 2013). Recent studies further emphasise that digital capability plays a critical role in enabling firms to transform digital investments into performance outcomes (Matarazzo et al., 2021; Joensuu-Salo & Matalamäki, 2023). Therefore, SMEs that are able to combine digital technology with strong internal capabilities are more likely to achieve improved organisational performance, while those lacking such capabilities may struggle to realise the full benefits of digital adoption.

Digital Capability

Digital capability reflects a firm's ability to effectively use digital technologies through its internal skills, knowledge, and organisational processes (Vial, 2019). It goes beyond simple adoption and focuses on how technologies are integrated into business operations. Recent studies show that digital capability plays a key role in improving organisational performance, as firms with stronger capabilities are better able to utilise digital tools to increase efficiency and growth (Verhoef et al., 2021; Joensuu-Salo & Matalamäki, 2023).

From a Resource-Based View (RBV) perspective, digital capability is a strategic resource that enables firms to transform digital technologies into performance outcomes (Barney, 1991; Bharadwaj et al., 2013). However, many SMEs, especially in developing economies, face challenges such as limited skills and resources, which restrict their ability to fully utilise digital technologies (OECD, 2021). Recent research also highlights those insufficient digital capabilities and organisational readiness continue to hinder SMEs in converting digital investments into performance gains (Bouwman et al., 2022; Troise et al., 2022). Therefore, digital capability plays a critical role in linking digital technology with organisational performance.

Organisational Performance

Organisational performance defines to a firm's capacity to achieve outcomes such as efficiency, growth, innovation, and competitiveness. Recent studies show that digital technologies can enhance SME performance by improving processes and enabling faster responses to market changes (Verhoef et al., 2021; Kraus et al., 2021). However, this impact is not consistent, as many firms do not achieve expected results from digital adoption alone (Vial, 2019).

Recent evidence suggests that performance depends on how effectively firms utilise digital technologies through their internal capabilities, such as skills and strategic alignment (Warner & Wäger, 2019; Joensuu-Salo & Matalamäki, 2023). Therefore, organisational performance is not directly driven by technology, but by the firm's ability to integrate and reconfigure resources and use it effectively.

Relationship Between Digital Technology & Performance

Recent literature suggests that digital technology has the potential to improve organisational performance in SMEs by enhancing efficiency, innovation, and market responsiveness (Verhoef et al., 2021; Kraus et al.,

2021; Seppänen et al., 2025). However, this relationship is not direct or automatic, as many firms fail to achieve expected performance outcomes despite adopting digital tools (Vial, 2019). This indicates that digital technology alone is insufficient to drive performance improvements.

Instead, studies indicate that the effect of digital technology depends on how effectively firms utilise it through their internal capabilities. Firms with strong digital skills, managerial support, and strategic alignment are show a greater tendency to to convert digital investments into improved performance outcomes (Joensuu-Salo & Matalamäki, 2023). This suggests that digital capability plays a key role in linking digital technology with organisational performance.

From an RBV perspective, digital technology acts as a resource, while capabilities determine how that resource is used to create value. Therefore, organisational performance is achieved when SMEs successfully combine digital technology with strong internal capabilities, rather than relying on technology alone.

Challenges in SMEs

Despite the growing importance of digital technology, SMEs face several challenges in effectively utilising these tools to improve organisational performance. Recent studies highlight that limited financial resources, lack of digital skills, and inadequate technological infrastructure are among the most common barriers to digital transformation in SMEs (Kraus et al., 2021; Troise et al., 2022; Seppänen et al., 2025). These constraints often prevent firms from moving beyond basic technology adoption towards strategic and effective use.

In addition, many SMEs lack managerial expertise and clear digital strategies, which further restrict their ability to integrate digital technologies into core business processes (Verhoef et al., 2021; Bouwman et al., 2022; Escoz-Barragán et al., 2025). As a result, even when digital tools are adopted, firms may fail to achieve meaningful performance improvements. This suggests that the challenge is not only access to technology, but the ability to use it effectively.

These issues are more significant in developing economies such as Bangladesh, where resource limitations and capability gaps are more pronounced (Seppänen et al., 2025; Escoz-Barragán et al., 2025).

Therefore, understanding these challenges is essential to explain why the relationship between digital technology and organisational performance remains inconsistent across SMEs.

Integrated View and Research Gap

The literature indicates that digital technology, digital capability, and organisational performance are closely interconnected in SMEs. Digital technologies such as e-commerce platforms, cloud systems, and digital tools provide opportunities to improve efficiency, innovation, and competitiveness. However, their impact on organisational performance is not automatic. Recent studies suggest that performance improvements depend on how effectively firms integrate and utilise digital technologies within their operations (Verhoef et al., 2021; Kraus et al., 2021). This highlights that digital capability plays a key role in linking digital technology with performance outcomes.

From a Resource-Based View (RBV) perspective, digital technology can be considered a resource, but it only creates value when supported by firm-specific capabilities such as skills, managerial expertise, and organisational processes (Bharadwaj et al., 2013). This means that SMEs that are able to combine digital technology with strong internal capabilities are more likely to achieve improved performance, while those lacking such capabilities may struggle to realise the benefits of digital adoption. Recent DBA-level research further highlights that digital capability, organisational readiness, and strategic alignment are critical for converting digital investments into sustained performance outcomes (Kraus et al., 2022; Matarazzo et al., 2024; Seppänen et al., 2025).

However, several gaps remain in the literature. Much of the existing research focuses on the direct relationship between digital technology and organisational performance, with limited attention given to how this relationship operates in SMEs (Bouwman et al., 2022; Autio et al., 2023). In addition, there is a lack of empirical evidence on the role of digital capability in shaping this relationship, particularly in developing country contexts such as Bangladesh, where resource and capability constraints are more significant (Matarazzo et al., 2024; Seppänen et al., 2025).

Therefore, this study aims to address these gaps by examining how digital technology and organisational performance are linked in SMEs in Bangladesh, with a particular focus on the role of digital capability from an RBV perspective.

Methodology

In this section I am going to explain the methods I use for data collection of this research

Data collection

Primary data were collected from 31 participants using a questionnaire-based survey. The survey instrument was designed to obtain information on digital technology utilisation, digital capability, and organisational performance in SMEs. A structured questionnaire, utilising Likert-scale items, was used to systematically capture respondents' perceptions and experiences.

The survey method was selected because it enables efficient data collection and supports quantitative analysis of relationships between variables (Saunders et al., 2019; Creswell & Creswell, 2018).

Population and Sampling

The study draws on a target population of SMEs operating in Bangladesh, reflecting the contextual focus of the research., as the research focuses on understanding the connection of digital technology and organisational performance within this context. The respondents included business owners, managers, executives, and policymakers, with the majority of participants being business owners. These individuals were considered appropriate as they are actively involved in strategic decision-making processes and have relevant knowledge of digital technology use within their organisations (Saunders et al., 2019).

A non-probability sampling approach, specifically snowball sampling, was used to collect data. This method was appropriate due to the difficulty of accessing SME participants and the need to reach relevant respondents through referrals. A total of 31 responses were collected for analysis. Snowball sampling is widely used in business research where the target population is not easily accessible (Saunders et al., 2019).

However, although this approach facilitated access to participants, it may limit the generalisability of the findings. Therefore, the findings should be interpreted with due caution.

Instrumentation

Data were gathered through a structured questionnaire that consisted of closed-ended items based on a Likert scale and a small number of open-ended questions to capture additional insights. The measurement items were adapted and modified from prior studies on digital transformation, digital capability, and organisational performance to ensure relevance and validity (Vial, 2019; Verhoef et al., 2021).

There were 22 questions in total, divided into the following sections:

- Demographic information (Including role, firm size and year)
- Digital Technology Adoption
- Organisational Performance
- Internal Resources and Capabilities
- Capability–Performance Relationship
- Sustained Performance

A 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree was used for most statements to measure respondents' perceptions.

Here are some examples of Likert items:

- “Our firm effectively uses digital technologies to improve operations.”
- “Digital tools have improved our business performance.”
- “Our organisation has the necessary skills to use digital technologies effectively.”
- “Digital capability has contributed to the growth of our firm.”

Open-ended questions were included to provide deeper insights into the types of technologies most commonly used, the challenges faced by SMEs, and the impact of digital technology on organisational growth

Data Analysis Techniques

The data were analysed using quantitative techniques, including descriptive statistics such as frequencies and percentages.

- **Quantitative Data Analysis**

Quantitative data were analysed using descriptive statistical techniques, specifically frequencies and percentages. Additional analysis was undertaken to explore relationships between digital technology, digital capability, and organisational performance (Creswell & Creswell, 2018).

- **Qualitative Data Analysis**

Qualitative data collected through open-ended responses to Q23 and Q24 were analysed through thematic analysis to identify common structures and key themes. This approach helped capture deeper insights into technology use, challenges, and perceived impacts on SME growth (Braun & Clarke, 2006).

Ethical Considerations

The study adhered to established ethical standards. Participation was voluntary, and informed consent was obtained after respondents were provided with details regarding the purpose of the research. All responses were kept anonymous and confidential, and the data were used only for academic purposes. The study followed accepted research ethics guidelines to ensure integrity and participant protection (Saunders et al., 2019).

Findings and Data Analysis

This study analyses data collected from 31 survey responses obtained from SMEs in Bangladesh. The purpose of the analysis is to explore how digital technology use, digital capability, and organisational performance are related. The study also considers how different factors influence the effective use of digital technologies within firms.

The analysis combines quantitative methods, including frequency and percentage distributions, with qualitative insights derived from open-ended responses. This mixed approach allows for a deeper understanding of patterns in the data and supports more meaningful interpretation of how digital technology contributes to organisational performance. It also enables the identification of key challenges and practical insights across different respondents.

Demographic Information (Q1-Q3)

Table 1: Role in the organisation

Category	Frequency	Percentage
Owner	18	58.1%

Manager	5	16.1%
Senior Executive	5	16.1%
other	3	9.7%

In terms of respondent category, the majority of participants are business owners (58.1%), followed by managers (16.1%) and senior executives (16.1%), while 9.7% fall into the “other” category. This distribution suggests that the findings are largely influenced by owner perspectives, which is valuable as they are directly involved in strategic decision-making. At the same time, the inclusion of managers and executives adds broader organisational insight, contributing to a more balanced understanding of digital technology use and performance.

Table 2: Firm Size

Category	Frequency	Percentage
1-10	8	25.8%
11-50	9	29%
51-100	7	22.6%
100+	7	22.6%

In terms of firm size, the majority of respondents come from SMEs with 11–50 employees (29%), followed by firms with 1–10 employees (25.8%). Organisations with 51–100 employees and more than 100 employees each represent 22.6% of the sample. This distribution indicates a relatively balanced representation across different SME sizes, allowing for a more comprehensive understanding of how digital technology and organisational performance may vary depending on firm size

Table 3: Years of Business Operation

Category	Frequency	Percentage
Less than 1 year	2	6.5%
1-3 years	16	51.6%
4-7 years	4	12.9%
8+ years	9	29%

The majority of respondents have been operating for 1–3 years (51.6%), followed by those with 8+ years of experience (29%). A smaller proportion of firms have been operating for 4–7 years (12.9%), while only 6.5% have less than one year of experience. This distribution suggests that most respondents represent relatively young but established businesses, which may influence them to adopt and use of digital technologies, while the presence of more experienced firms adds depth to the analysis.

Table 4: Digital Technology Adoption

Scale	Adopts new digital technologies	Uses digital technologies	Uses digital platforms	Integrates digital technologies effectively
Strongly disagree	6.5%	0%	3.2%	0%
Disagree	19.4%	3.2%	6.5%	3.2%
Neutral	29%	22.6%	22.6%	19.4%
Agree	25.8%	61.3%	48.4%	71%
Strongly agree	19.4%	12.9%	19.4%	6.5%

In terms of Digital Technology Adoption SMEs show a moderate to high level of digital technology adoption across different areas. For adopting new digital technologies, responses are relatively mixed, with the highest proportion being neutral (29%), followed by agree (25.8%), suggesting that while many firms are adopting new technologies, some remain uncertain or at an early stage.

In contrast, the use of digital technologies in daily operations shows a strong positive trend, with the majority of respondents agreeing (61.3%), indicating that digital tools are widely integrated into routine business activities. Similarly, the use of digital platforms such as e-commerce and social media is also relatively high, with 48.4% agreeing, although some respondents remain neutral, suggesting variation in adoption levels across firms.

The strongest agreement is observed in the integration of digital technologies across different functions, where 71% of respondents agreed, indicating that many SMEs are actively embedding digital tools into their organisational processes. However, the presence of neutral and some negative responses across all categories suggests that full digital adoption and integration are still developing in certain firms.

Table 5:

Organisational Performance:

Scale	Improved operational efficiency	Enhanced customer satisfaction	Firm's productivity increased	Improved organisational performance.
Strongly disagree	3.2%	0%	0%	0%
Disagree	3.2%	6.5%	6.5%	3.2%
Neutral	22.6%	16.1%	22.6%	25.8%
Agree	54.8%	67.7%	64.5%	64.5%
Strongly agree	16.1%	9.7%	6.5%	6.5%

The findings indicate that digital technology has a strong positive impact on organisational performance in SMEs. A large majority of respondents agree that digital technologies have improved operational efficiency (54.8%), enhanced customer satisfaction (67.7%), and increased productivity (64.5%). Similarly, 64.5% of respondents agree that overall organisational performance has improved, suggesting a consistent positive perception across all performance dimensions.

However, the presence of neutral responses—particularly for productivity (22.6%) and organisational performance (25.8%)—indicates that these benefits are not experienced equally across all firms. This variation suggests that while many SMEs are benefiting from digital technologies, others may not be fully utilising them. Therefore, the results imply that performance improvements depend on how effectively digital technologies are implemented, rather than adoption alone, reinforcing the importance of internal capabilities.

Table 6: Performance Relationship

Scale	Digital technology improves internal capabilities.	Digital technologies enhance the value of firm	Proper skills and resources are important	Internal capabilities determine technologies performance
Strongly disagree	0%	0%	0%	3.2%
Disagree	3.2%	3.2%	6.5%	3.2%
Neutral	29%	12.9%	12.9%	19.4%
Agree	54.8%	74.2%	48.4%	51.5%
Strongly agree	12.9%	9.7%	32.3%	22.6%

Respondents largely recognise the importance of digital technology in strengthening internal capabilities. A majority agree that digital technologies enhance the value of the firm (74.2%) and improve internal capabilities (54.8%), suggesting that technology plays a significant role in building organisational strength. In addition, a high level of agreement (48.4% agree and 32.3% strongly agree) highlights those skills and resources are essential, reinforcing the idea that capabilities are necessary to effectively use digital technologies.

However, responses related to whether internal capabilities determine technology performance show slightly more variation, with 19.4% remaining neutral. This suggests that while most respondents acknowledge the importance of capabilities, not all firms fully understand or experience this relationship. Overall, the argument shows that digital technology alone is not sufficient, and that internal capabilities play a key role in shaping performance outcomes, aligning with the Resource-Based View (RBV).

7: Sustained Performance

Scale	Contributed to long-term business success	Achieved sustained growth by digital technologies	Technologies maintain competitive advantage
Strongly disagree	0%	0%	0%
Disagree	3.2%	3.2%	3.2%
Neutral	9.7%	25.8%	16.1%
Agree	64.5%	54.8%	64.5%
Strongly agree	22.6%	16.1%	16.1%

digital technologies make a strong contribution to sustained organisational performance in SMEs. A clear majority of respondents agree that digital technologies support long-term business success (64.5%), sustained growth (54.8%), and the maintenance of competitive advantage (64.5%). The presence of additional strongly agree responses further provides additional support for the view that digital technologies are perceived as fundamental drivers of long-term performance outcomes.

However, relatively higher neutral responses—particularly for sustained growth (25.8%)—indicate that not all firms experience these long-term benefits equally. This suggests that while digital technologies provide significant opportunities, their ability to generate sustained performance and competitive advantage may depend on how effectively they are utilised within the firm. Overall, the results highlight those digital technologies can support long-term success, but their impact is likely influenced by internal capabilities and strategic use.

What types of digital technologies are currently used in your organisation, and what kind of challenges are you facing? – thematic analysis

Thematic analysis was applied to responses to Q23, as individual responses often contained multiple overlapping themes. The findings are presented in two tables: Table 8 illustrates the types of digital technologies used, and Table 9 outlines the challenges encountered.

Table 8: Digital Technologies Used:

Theme	Frequency	Percentage
Communication tools (Teams, Slack, Zoom, email)	7	22.6%
Cloud platforms & storage	6	19.4%
CRM / ERP / Accounting systems	5	16.1%
Marketing & social media platforms	4	12.9%
Data analytics tools	3	9.7%
Project management tools	2	6.5%
Development / technical systems	2	6.5%
Devices / hardware	2	6.5%

Table 9: Challenges Faced

Theme	Frequency	Percentage
Skill gaps / lack of training	6	19.4%
Cost constraints	5	16.1%
Integration issues	5	16.1%
Cybersecurity risks	4	12.9%
Technical issues (errors, downtime)	4	12.9%
Infrastructure problems (internet/network)	3	9.7%
Coordination challenges	2	6.5%
Resistance to change	2	6.5%

The findings from Tables 8 and 9 provide a overview of both the digital technologies used and the challenges faced by SMEs. Table 8 shows that the most commonly used technologies are communication tools (22.6%) and cloud platforms (19.4%), followed by CRM/ERP systems (16.1%), indicating that digital technologies are widely adopted for communication, data management, and operational support. Other technologies, such as marketing platforms, data analytics tools, and project management systems, are used to a lesser extent, suggesting variation in the level of digital maturity across firms.

However, Table 9 reveals several key challenges that may limit the effective use of these technologies. The most significant issues include skill gaps (19.4%), cost constraints (16.1%), and integration issues (16.1%), highlighting that many SMEs face capability and resource limitations. Additionally, concerns related to cybersecurity (12.9%) and technical issues (12.9%) indicate ongoing operational risks associated with digital adoption.

Taken together, the results suggest that while SMEs are actively adopting a range of digital technologies, their ability to fully leverage these tools is constrained by internal and structural challenges. This highlights that effective utilisation of digital technology depends not only on adoption but also on the availability of skills, resources, and organisational capabilities.

Table 10: How has digital capability contributed to your firm's growth? - thematic analysis

Theme	Frequency	Percentage
Improved efficiency & time saving	9	29.0%
Better communication & workflow	5	16.1%
Increased productivity & performance	6	19.4%
Enhanced decision-making (data use)	4	12.9%
Expanded market reach & growth	5	16.1%
Cost reduction & automation	3	9.7%
Scalability & business expansion	3	9.7%
Other / unclear responses	2	6.5

The findings show that digital capability contributes to firm growth in several important ways. The most frequently reported benefit is improved efficiency and time saving (29%), indicating that digital tools help streamline operations and reduce manual work. This is followed by increased productivity (19.4%) and improvements in communication and workflow (16.1%), suggesting that digital technologies support smoother and faster business processes.

In addition, respondents highlighted the role of digital capability in expanding market reach (16.1%) and enabling better decision-making (12.9%), showing its importance for strategic growth. Other contributions, such as cost reduction and scalability, were also mentioned, although less frequently. Overall, the findings suggest that digital capability plays a significant role in supporting both operational efficiency and long-term business growth, although its impact varies across firms.

Conclusion

SMEs should focus not only on adopting digital technologies but also on developing strong internal capabilities that enable effective utilisation of these technologies. In particular, organisations need to invest in employee skill development to ensure that workers are able to use digital tools efficiently and confidently. Enhancing digital knowledge and competencies across the workforce will allow firms to maximise the value of their existing technologies and improve overall productivity. Without adequate skills and understanding, even advanced technologies may fail to deliver meaningful performance improvements.

In addition, SMEs should adopt a more strategic and integrated approach to technology implementation. Rather than using digital tools in isolation, firms should ensure that different systems are properly aligned and integrated across various organisational functions. This can help reduce inefficiencies, improve communication, and support better decision-making. SMEs should also consider adopting cost-effective and scalable digital solutions that match their specific needs and resource constraints. A gradual and well-planned approach to digital adoption can minimise risks and ensure sustainable implementation.

Furthermore, the findings establish the significance of addressing key challenges such as cybersecurity risks and system reliability issues. SMEs need to invest in secure digital infrastructures and establish proper data protection measures to build trust and reduce potential risks. Ensuring system stability and minimising technical disruptions are also critical for maintaining smooth business operations.

Overall, SMEs should aim to achieve a balance between technology adoption and capability development. By combining digital tools with strong internal skills, strategic alignment, and effective management practices, firms can enhance their organisational performance and achieve more sustainable and consistent growth in the long term.

References

- Autio, O. (2023). Development of Students' Attitudes towards Technology Education between Years 1993-2022 in Finnish Comprehensive School. *International Journal of Technology in Education and Science*, 7(3), 365-385.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). Digital business strategy: toward a next generation of insights. *MIS quarterly*, 37(2), 471-482.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). Digital business strategy: toward a next generation of insights. *MIS quarterly*, 37(2), 471-482.
- Bouwman, F. H., Frisoni, G. B., Johnson, S. C., Chen, X., Engelborghs, S., Ikeuchi, T., ... & Teunissen, C. (2022). Clinical application of CSF biomarkers for Alzheimer's disease: From rationale to ratios. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 14(1), e12314.
- Booth, A., Martyn-St James, M., Clowes, M., & Sutton, A. (2021). Systematic approaches to a successful literature review.
- Bouwman, F. H., Frisoni, G. B., Johnson, S. C., Chen, X., Engelborghs, S., Ikeuchi, T., ... & Teunissen, C. (2022). Clinical application of CSF biomarkers for Alzheimer's disease: From rationale to ratios. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 14(1), e12314.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Canton, H. (2021). Organisation for economic co-operation and development—OECD. In *The Europa directory of international organizations 2021* (pp. 677-687). Routledge.
- Canton, H. (2021). United nations conference on trade and development—unctad. In *The Europa directory of international organizations 2021* (pp. 172-176). Routledge.cr
- de Oliveira Santos, M., de Lima, F. C. D. S., Martins, L. F. L., Oliveira, J. F. P., de Almeida, L. M., & de Camargo Cancela, M. (2023). Estimativa de incidência de câncer no Brasil, 2023-2025. *Revista Brasileira de Cancerologia*, 69(1).
- Escoz Barragan, K., & Becker, F. S. R. (2025). Keeping pace with the digital transformation—exploring the digital orientation of SMEs. *Small Business Economics*, 64(3), 1361-1385.
- Escoz Barragan, K., & Becker, F. S. R. (2025). Keeping pace with the digital transformation—exploring the digital orientation of SMEs. *Small Business Economics*, 64(3), 1361-1385.

- Joensuu-Salo, S., & Matalamäki, M. (2023). The impact of digital capability on firm performance and growth in incumbent SMEs. *Journal of Enterprising Culture*, 31(02), 211-232.
- Kallmuenzer, A., Kraus, S., Bouncken, R., & Reinwald, D. (2023). Ecological and social sustainable change through corporate social responsibility: The enabling role of employees. *Strategic Change*, 32(4-5), 153-166.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long range planning*, 51(1), 40-49.
- Kraus, S., Breier, M., Lim, W. M., Dabić, M., Kumar, S., Kanbach, D., ... & Ferreira, J. J. (2022). Literature reviews as independent studies: guidelines for academic practice. *Review of managerial science*, 16(8), 2577-2595.
- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. *Sage Open*, 11(3), 21582440211047576.
- Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 26.
- Li, Y., Zhang, Y., Timofte, R., Van Gool, L., Yu, L., Li, Y., ... & Wang, X. (2023). NTIRE 2023 challenge on efficient super-resolution: Methods and results. In *Proceedings of the IEEE/CVF conference on computer vision and pattern recognition* (pp. 1922-1960).
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business research*, 123, 642-656.
- Matarazzo, M., Pérez-Soriano, A., Vafai, N., Shahinfard, E., Cheng, K. J. C., McKenzie, J., ... & Stoessl, A. J. (2024). Misfolded protein deposits in Parkinson's disease and Parkinson's disease-related cognitive impairment, a [11C] PBB3 study. *npj Parkinson's Disease*, 10(1), 96.
- Pearlson, K. E., Saunders, C. S., & Galletta, D. F. (2019). *Managing and using information systems: A strategic approach*. John Wiley & Sons.
- Seppänen, E. (2025). Johtamisen merkitys luottamuksen rakentumiseen virtuaaliitmeissä.
- Troise, C., Corvello, V., Ghobadian, A., & O'Regan, N. (2022). How can SMEs successfully navigate VUCA environment: The role of agility in the digital transformation era. *Technological Forecasting and Social Change*, 174, 121227.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of business research*, 122, 889-901.
- Vial, G. (2019). Reflections on quality requirements for digital trace data in IS research. *Decision Support Systems*, 126, 113133.
- Wade, M., & Hulland, J. (2004). The resource-based view and information systems research: review, extension, and suggestions for future Research1. *MIS quarterly*, 28(1), 107-142.

Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long range planning*, 52(3), 326-349.

A Reflective Essay on the Difficulties of My Research Journey

This research journey has been both challenging and rewarding, requiring not only academic effort but also a high level of personal resilience and adaptability. It has always been my dream to conduct research, and I have been very passionate about it from the beginning. Throughout the process, I faced several difficulties, including understanding complex literature, identifying a clear research gap, and collecting reliable data. Conducting research while being based in the UK and focusing on SMEs in Bangladesh added an extra layer of complexity due to geographical distance and time differences, which made communication and coordination more difficult. At different stages, the process felt overwhelming, and there were moments when I even considered giving up.

However, my passion for research motivated me to keep going. By staying committed to my goals, following the guidance provided by the university, and continuously improving my approach, I was able to overcome these challenges. This journey has significantly strengthened my research skills, enhanced my critical thinking ability, and increased my confidence in handling academic work independently. Overall, it has been an important learning experience that has contributed to both my academic development and personal growth.

Reading Literature and Finding a Gap in Research:

One of the most challenging parts of my research journey was reading academic literature and identifying a clear research gap. At the beginning, I found it difficult to understand how different studies were connected and how they related to my topic. Many articles discussed digital technology and organisational performance, but identifying what was missing required deeper critical thinking and careful analysis. Research is never easy, and reviewing a large number of journal articles was both time-consuming and sometimes confusing, as it involves not only summarising existing knowledge but also critically evaluating and synthesising different perspectives (Booth et al., 2021). There were moments when I felt lost and unsure about the direction of my study.

However, as I continued reading and engaging with the literature, my understanding gradually improved. I became more confident in analysing different perspectives and identifying patterns across studies. This process helped me recognise a meaningful research gap, particularly in relation to the role of digital capability in SMEs within the context of Bangladesh.

Problems in Gathering Data:

Collecting data was one of the most difficult stages of my research. As I am currently based in the UK while my research focuses on SMEs in Bangladesh, the geographical distance created several challenges. The 5-hour time difference made communication difficult and slowed down the overall process. It was not easy to reach participants, and some respondents did not fully answer the questions, while others provided unclear or disconnected responses. In addition, some participants faced difficulties in understanding certain survey questions, which affected the accuracy and consistency of their responses. This impacted the overall quality of the data and required additional effort to manage and interpret, which is a common challenge in survey-based research, particularly when using remote data collection methods (Saunders et al., 2019; Creswell & Creswell, 2018). In some cases, I had to follow up with participants or carefully analyse incomplete answers to ensure they could still be used.

As a result, it is important to acknowledge that some of the collected data may not be highly valuable or fully reliable, which represents a limitation of this study. Such issues related to response quality and data reliability are widely recognised in primary research, especially when participants have varying levels of

understanding (Bryman, 2016). Despite these challenges, I remained patient and committed to the process until I successfully collected 31 responses.

Managing and Handling Data:

Managing and analysing the collected data was also a demanding and time-consuming task. I had to organise both quantitative and qualitative data in a clear and meaningful way to ensure accurate interpretation. Some responses were inconsistent, incomplete, or unclear, which made the analysis more complex and required careful judgement. Creating tables, calculating percentages, and identifying patterns required a high level of attention to detail. In addition, conducting thematic analysis for open-ended responses was particularly challenging, as I needed to group similar ideas, interpret different viewpoints, and identify key themes from varied responses.

Despite these challenges, this stage of the research process was highly valuable, as it helped me develop my analytical and critical thinking skills. It also gave me practical experience in handling real-world research data, improving my ability to organise, interpret, and present findings in a structured and meaningful way.

Personal Problems and Growth:

This research journey was not only academically challenging but also personally demanding. At several stages, I felt overwhelmed and even considered giving up due to the pressure and difficulties I faced. Balancing my studies while adapting to life in the UK was not easy, especially as I was conducting research focused on SMEs in Bangladesh, which added extra challenges such as distance and communication barriers. However, I remained committed to my goal and pushed myself to continue the process despite these obstacles.

As this is my Term 2, I have noticed a significant improvement in my confidence and overall academic ability compared to earlier stages of my studies. I became more organised, better at managing my time, and more capable of handling research-related challenges independently. The guidance and support provided by the university were extremely helpful, as they gave me a clearer structure and direction, making the research process more manageable.

Overall, this experience has contributed greatly to both my personal and academic growth. It has strengthened my confidence, improved my patience, and developed my problem-solving skills. More importantly, it has taught me how to stay focused and resilient even when facing difficulties, which will be valuable for my future studies and career.

Final Thoughts

Overall, this research journey has been both challenging and highly valuable, offering important lessons not only in academic research but also in personal development. Throughout the process, I realised that research is not a straightforward task; it requires persistence, patience, and continuous learning. From struggling with literature review to facing difficulties in data collection and analysis, each stage presented its own challenges. However, these challenges also became opportunities for learning and improvement. I gradually developed stronger research skills, including critical thinking, data analysis, and the ability to connect theory with real-world findings.

In addition, this experience has helped me become more independent and confident in my academic work. At times, the process felt overwhelming, especially when dealing with unclear data or managing time effectively, but I learned how to stay focused and continue moving forward. The support and guidance from the university also played a key role in helping me stay on track and complete the research successfully.

Most importantly, this journey has shown me that success in research is not only about achieving results, but also about the effort, resilience, and learning gained throughout the process. Even when the process becomes difficult, staying committed and maintaining a positive mindset can make a significant difference. Overall, this experience has prepared me for future academic and professional challenges, and it has given me a deeper appreciation of the research process.