



DIGITALISATION AS A GROWTH STRATEGY FOR MSMEs: AN EMPIRICAL STUDY

Research Paper

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Abstract

Micro, Small and Medium Enterprises (MSMEs) play a significant role in employment generation, entrepreneurship, innovation and economic development. However, MSMEs face several challenges, including limited financial resources, intense competition, changing consumer preferences and difficulties in accessing wider markets. Digitalisation provides MSMEs with opportunities to overcome some of these challenges through digital payments, e-commerce, social media marketing, cloud-based applications, digital accounting, customer relationship management and data-driven decision-making. The present study examines digitalisation as a growth strategy for MSMEs and analyses the relationship between the adoption of digital technologies and business growth. The study focuses on digital payments, digital marketing, e-commerce, cloud applications, digital accounting and customer engagement. A descriptive and analytical research design is adopted. Primary data may be collected through a structured questionnaire from MSME owners and managers. For demonstrating the proposed analysis, an illustrative sample of 150 MSMEs is considered. Percentage analysis, mean scores and correlation analysis are used to examine the relationship between digitalisation and business growth. The illustrative findings indicate that MSMEs adopting a greater range of digital technologies tend to report improvements in market reach, customer engagement, operational efficiency and sales performance. The study recommends strengthening digital skills, improving cybersecurity awareness, encouraging affordable digital solutions and providing appropriate institutional support to MSMEs.

Keywords: Digitalisation; MSMEs; Digital Transformation; Business Growth; Digital Marketing; E-Commerce; Digital Payments; Entrepreneurship.

1. Introduction

Micro, Small and Medium Enterprises (MSMEs) constitute an important part of the Indian business ecosystem. They contribute to employment generation, entrepreneurship, innovation, production and regional economic development. MSMEs operate across manufacturing, trading and service sectors and provide opportunities for individuals to establish and expand their businesses.

The business environment has undergone significant changes due to rapid technological development. Consumers increasingly use smartphones, social media, digital payment systems and online platforms for

discovering, evaluating and purchasing products and services. Consequently, businesses are required to adapt to changing consumer expectations.

Digitalisation refers to the adoption and use of digital technologies to improve business processes, customer interactions, marketing, financial transactions and decision-making. For MSMEs, digitalisation can provide opportunities to improve operational efficiency while reaching customers beyond traditional geographical markets.

Digital payments can simplify transactions, while e-commerce platforms can provide access to wider markets. Social media marketing can enable MSMEs to promote their products at relatively lower costs. Cloud-based applications can help businesses manage accounting, inventory and customer information. Digital communication tools can also improve interaction with customers and suppliers.

Despite these opportunities, many MSMEs face barriers to digitalisation. These include lack of digital skills, financial constraints, cybersecurity concerns, inadequate infrastructure, resistance to change and uncertainty regarding the benefits of technology.

Therefore, digitalisation should not be viewed simply as the adoption of technology. It should be considered a strategic approach to improving competitiveness and achieving sustainable business growth. The present study examines the role of digitalisation as a growth strategy for MSMEs and identifies the major digital technologies adopted by MSMEs and their perceived contribution to business performance.

2. Statement of the Problem

MSMEs operate in an increasingly competitive environment. Traditional methods of marketing, sales, accounting and customer management may not always be sufficient to meet the changing expectations of consumers.

Although digital technologies provide MSMEs with opportunities to improve efficiency and expand their markets, the level of adoption varies considerably across businesses. Some enterprises have adopted digital payments, social media marketing and e-commerce, while others continue to rely primarily on conventional business practices.

The lack of digital skills, investment capacity and awareness may prevent MSMEs from fully benefiting from digital technologies. Therefore, it is important to examine whether digitalisation contributes to business growth and to identify the challenges faced by MSMEs in adopting digital technologies.

3. Need and Significance of the Study

The study is significant because MSMEs are important contributors to economic development and provide substantial opportunities for entrepreneurship and employment. At the same time, increasing digitalisation is changing the way businesses communicate with customers, market products, receive payments, maintain records and make decisions.

The study is expected to be useful to MSME owners and managers by identifying digital practices that may support business growth. It is also relevant to policymakers and MSME-support institutions because the findings can indicate areas where training, awareness programmes, affordable technology and cybersecurity support may be required.

4. Justification of the Study

The justification for undertaking this study arises from the growing gap between the opportunities created by digital technologies and the practical capacity of many MSMEs to use those technologies strategically. While digital payments, social media, e-commerce, cloud applications and digital accounting have become increasingly accessible, adoption does not necessarily translate automatically into improved business performance.

A focused empirical examination is therefore necessary to understand whether the extent of digital technology adoption is associated with improvements in sales, customer reach, operational efficiency, customer engagement and competitiveness. The study is also justified by the need to identify the specific technologies that are most accessible to MSMEs and the barriers that prevent deeper digital adoption.

From a managerial perspective, the study can help MSME owners move from ad-hoc technology use towards a more strategic digitalisation roadmap. From a policy perspective, the findings can help support institutions design interventions around digital skills, affordability, cybersecurity and technology awareness. Academically, the study contributes to the growing discussion on digital transformation by examining digitalisation specifically as a growth strategy for MSMEs rather than treating technology adoption as an end in itself.

Thus, the study is justified by its practical relevance, policy usefulness and potential contribution to understanding the relationship between digitalisation and MSME growth.

5. Objectives of the Study

1. To examine the extent of digitalisation among MSMEs.
2. To identify the major digital technologies adopted by MSMEs.
3. To examine the role of digitalisation in MSME growth.
4. To analyse the relationship between digital technology adoption and business performance.
5. To identify the major challenges faced by MSMEs in adopting digital technologies.
6. To examine whether digital marketing contributes to market expansion.
7. To suggest strategies for effective digitalisation of MSMEs.

6. Research Questions

1. What is the level of digitalisation among MSMEs?
2. Which digital technologies are most commonly adopted by MSMEs?
3. Does digitalisation contribute to business growth?
4. Does digital marketing help MSMEs expand their customer base?
5. What are the major barriers to digitalisation?
6. Does digital payment adoption improve business efficiency?
7. What strategies can help MSMEs achieve successful digital transformation?

7. Hypotheses of the Study

H₀₁: There is no significant relationship between digitalisation and the growth of MSMEs.

H₁₁: There is a significant relationship between digitalisation and the growth of MSMEs.

H₀₂: Digital marketing adoption has no significant relationship with market expansion of MSMEs.

H₁₂: Digital marketing adoption has a significant relationship with market expansion of MSMEs.

H₀₃: Digital payment adoption has no significant relationship with operational efficiency.

H₁₃: Digital payment adoption has a significant relationship with operational efficiency.

8. Review of Literature

Digital transformation has increasingly become an important area of research in entrepreneurship and MSME development.

OECD (2021) has highlighted the importance of digitalisation in improving the resilience and competitiveness of SMEs. Digital tools can enable smaller businesses to improve processes, access markets and respond to changing business conditions.

World Bank research on digital technologies has emphasised the potential of digitalisation to improve productivity, market access and economic opportunities.

Bharadwaj et al. (2013) discussed digital business strategy and argued that digital technologies increasingly influence business strategy rather than remaining a separate technology function.

Vial (2019) developed a framework for digital transformation and highlighted how digital technologies can alter value creation, organisational processes and business models.

Verhoef et al. (2021) examined digital transformation from a multidisciplinary perspective and emphasised the need for organisations to align technology adoption with strategy, organisational capabilities and customer needs.

OECD (2023) has continued to emphasise digitalisation as an important factor in SME competitiveness, innovation and resilience.

The literature suggests that digitalisation can create significant opportunities for MSMEs. However, technology adoption alone may not guarantee business growth. The benefits depend on digital capabilities, employee skills, management commitment, appropriate technology selection and integration with business strategy.

9. Research Methodology

9.1 Research Design

The study adopts a descriptive and analytical research design.

9.2 Sources of Data

Primary data may be collected from MSME owners/managers through a structured questionnaire. Secondary information may be obtained from research journals, books, government reports, MSME-related publications, RBI reports, industry reports, OECD reports, World Bank publications and academic databases.

9.3 Population of the Study

The population consists of MSMEs operating in selected manufacturing, trading and service sectors.

9.4 Sample Size

For demonstrating the proposed analysis, an illustrative sample of 150 MSMEs is considered.

9.5 Sampling Technique

Convenience and purposive sampling may be adopted depending on accessibility to MSME owners and managers.

9.6 Data Collection Instrument

A structured questionnaire may be divided into four sections.

Section A – Business Profile: Type of business, nature of business, years of operation, number of employees, annual turnover category and ownership structure.

Section B – Digital Technology Adoption: Digital payments, social media marketing, e-commerce platforms, digital accounting, cloud applications, customer relationship management tools, business communication applications, data analytics and artificial intelligence tools.

Section C – Business Growth: Sales growth, customer growth, market expansion, operational efficiency, customer satisfaction, profitability and business competitiveness.

Section D – Challenges: Cost of technology, lack of digital skills, cybersecurity concerns, lack of awareness, internet connectivity, resistance to change and difficulty selecting appropriate technology.

A five-point Likert scale may be used: 1 – Strongly Disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 – Strongly Agree.

10. Conceptual Framework

Digitalisation

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Operational Efficiency + Market Reach + Customer Engagement

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MSME Business Growth

The framework assumes that effective adoption of digital technologies can improve business processes and customer reach, ultimately contributing to MSME growth.

Digital Payments	Digital Marketing	E-Commerce	Digital Accounting	Cloud Applications	Customer Relationship Management
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11. Data Analysis and Interpretation

Note: The following numerical data are illustrative and must be replaced with actual survey data before journal submission. The statistical results should be recalculated using the final dataset.

12. Profile of MSMEs

Interpretation: The illustrative data indicate that 42% of the respondents belong to trading businesses, followed by service enterprises at 30% and manufacturing enterprises at 28%.

Nature of Business	Respondents	Percentage
Manufacturing	42	28.0%
Trading	63	42.0%
Services	45	30.0%
Total	150	100%

13. Digital Technology Adoption among MSMEs

Note: Multiple responses were permitted.

Interpretation: Digital payments have the highest adoption rate at 88%, followed by WhatsApp Business at 80% and social media marketing at 74%. E-commerce platforms are used by 56% of respondents. Cloud applications and AI tools have comparatively lower adoption. This indicates that MSMEs are more likely to adopt relatively accessible and easy-to-use digital tools, while advanced technologies have comparatively lower adoption.

Digital Tool	Respondents	Percentage
Digital Payments	132	88.0%
WhatsApp Business	120	80.0%
Social Media Marketing	111	74.0%
E-Commerce Platforms	84	56.0%
Cloud Applications	63	42.0%
AI Tools	45	30.0%

14. Perceived Benefits of Digitalisation

Interpretation: Faster transactions are identified as an important benefit, reported by 86% of respondents. Improved customer communication and wider customer reach are also significant benefits. This indicates that digitalisation can contribute to both operational and marketing improvements.

Benefit	Respondents Agreeing	Percentage
Wider customer reach	121	80.7%
Improved customer communication	126	84.0%
Faster transactions	129	86.0%
Improved marketing	115	76.7%

Reduced operating costs	98	65.3%
Improved sales	108	72.0%
Better record keeping	102	68.0%

15. Digitalisation and Business Growth

Interpretation: The illustrative findings indicate that half of the respondents perceive digitalisation as having a high impact on business growth. 38% report a moderate impact, while 12% report a low impact.

Level of Impact	Respondents	Percentage
Low	18	12.0%
Moderate	57	38.0%
High	75	50.0%
Total	150	100%

16. Digitalisation and Market Expansion

Interpretation: The illustrative findings indicate that 43.3% of MSMEs experienced significant market expansion after adopting digital tools, while 40.7% reported moderate expansion. This suggests that digitalisation can help MSMEs overcome geographical limitations and reach new customers.

Market Expansion	Respondents	Percentage
No significant expansion	24	16.0%
Moderate expansion	61	40.7%
Significant expansion	65	43.3%
Total	150	100%

17. Challenges in Digitalisation

Note: Multiple responses were permitted.

Interpretation: Lack of digital skills is the most commonly reported challenge, followed by the cost of technology and cybersecurity concerns. This indicates that digitalisation requires not only technology but also appropriate skills and awareness.

Challenge	Respondents	Percentage
Lack of digital skills	86	57.3%
Cost of technology	78	52.0%
Cybersecurity concerns	72	48.0%
Lack of awareness	63	42.0%
Internet/connectivity issues	45	30.0%
Resistance to change	39	26.0%
Difficulty selecting suitable tools	55	36.7%

18. Correlation between Digitalisation and Business Growth

Illustrative significance: $p < 0.01$

Interpretation: The illustrative correlation coefficient of 0.67 indicates a positive relationship between digitalisation and business growth. This suggests that MSMEs with higher levels of digital technology adoption

tend to report better business growth. If the actual statistical test confirms significance, the null hypothesis may be rejected.

Variables	Correlation Coefficient
Digitalisation	0.67
Business Growth	1.00

19. Regression Analysis

Proposed Model:

$$\text{Business Growth} = \beta_0 + \beta_1(\text{Digital Marketing}) + \beta_2(\text{E-Commerce}) + \beta_3(\text{Digital Payments}) + \beta_4(\text{Digital Accounting}) + \varepsilon$$

Illustrative $R^2 = 0.49$

Interpretation: The illustrative regression results suggest that digital marketing has the strongest relationship with business growth, followed by e-commerce and digital payments. The model explains approximately 49% of the variation in business growth in this illustrative analysis. Actual regression values should be calculated using the final survey dataset.

Variable	Beta	Significance
Digital Marketing	0.31	0.002
E-Commerce	0.27	0.006
Digital Payments	0.22	0.014
Digital Accounting	0.18	0.029

20. Major Findings

1. Digital payments are the most widely adopted digital technology among the surveyed MSMEs.
2. WhatsApp Business and social media marketing are also widely used.
3. Adoption of advanced technologies such as AI remains comparatively low.
4. Digitalisation helps MSMEs improve customer communication.
5. Digital tools help MSMEs reach customers beyond their traditional geographical markets.
6. Digital payments contribute to faster and more convenient transactions.
7. Digital marketing provides MSMEs with relatively accessible promotional opportunities.
8. A positive relationship exists between digitalisation and business growth in the illustrative analysis.
9. Lack of digital skills is a major barrier to digital transformation.
10. Cybersecurity and technology costs are important concerns.
11. MSMEs require appropriate training and institutional support for effective digitalisation.

21. Suggestions

1. Digital Skills Development – MSME owners and employees should be provided with training in digital marketing, digital payments, accounting software, e-commerce and cybersecurity.
2. Affordable Digital Solutions – MSMEs should select cost-effective digital solutions appropriate to their business size and requirements.
3. Digital Marketing – MSMEs should make greater use of social media platforms to create brand awareness and communicate with customers.
4. E-Commerce Adoption – MSMEs should explore suitable e-commerce platforms to expand their market reach.
5. Cybersecurity Awareness – Businesses should adopt basic cybersecurity practices, including strong passwords, secure payment systems, employee awareness and regular software updates.
6. Digital Accounting – Digital accounting systems can help improve financial record keeping, reporting and decision-making.
7. Government and Institutional Support – Government agencies and MSME support institutions can provide training, awareness programmes and assistance for digital adoption.
8. Encourage Innovation – MSMEs should continuously evaluate emerging technologies and adopt those that provide measurable business benefits.
9. Customer-Centric Digitalisation – Technology adoption should be based on customer requirements rather than adopting technology simply because it is popular.
10. Strategic Digital Planning – MSMEs should develop a digitalisation roadmap identifying business objectives, required technologies, investment requirements and expected outcomes.

22. Conclusion

Digitalisation has emerged as an important strategic opportunity for MSMEs operating in an increasingly competitive and technology-driven environment. Digital payments, social media marketing, e-commerce, digital accounting and cloud-based applications can help MSMEs improve efficiency, customer engagement and market access.

The illustrative findings of the study indicate a positive relationship between digitalisation and MSME business growth. MSMEs adopting digital tools may benefit from wider customer reach, faster transactions, improved communication, better marketing and enhanced operational efficiency.

However, successful digitalisation depends on more than technology adoption. Lack of digital skills, financial constraints, cybersecurity concerns and limited awareness can restrict the ability of MSMEs to fully utilise digital technologies.

Therefore, MSMEs should approach digitalisation as a strategic business transformation process rather than merely as the introduction of new technology. Business owners should identify their specific requirements, select appropriate digital tools, train employees and regularly evaluate the benefits of digital investments.

Government agencies, financial institutions, technology providers and educational institutions can also contribute by providing affordable digital solutions, training and awareness programmes.

In conclusion, effective digitalisation can strengthen the competitiveness and growth potential of MSMEs when technology adoption is aligned with business objectives, organisational capabilities and customer needs.

