
IMPACT OF DIGITALIZATION ON SMALL BUSINESSES: AN ANALYTICAL STUDY WITH SPECIAL REFERENCE TO CALICUT DISTRICT

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ABSTRACT

Digitalization has transformed the operational structure of small businesses by improving communication, marketing, financial management, and customer engagement. The adoption of digital technologies such as digital payments, online marketing, e-commerce platforms, and internet-based communication has significantly influenced the growth and efficiency of small business enterprises. The present study analyses the impact of digitalization on small businesses in Calicut district. The study is based on primary data collected from 100 respondents through a structured questionnaire. Percentage analysis and interpretative analysis were employed to examine digital adoption patterns, internet accessibility, digital marketing practices, business efficiency, revenue generation, and challenges faced by small businesses. The findings reveal that digitalization positively influences operational efficiency, customer communication, market expansion, and revenue growth. However, financial constraints, inadequate technical skills, and poor internet connectivity remain major barriers to digital adoption. The study concludes that digital transformation has become essential for the growth and sustainability of small businesses in the modern competitive market.

KEYWORDS: Digitalization, Small Businesses, Digital Marketing, E-Commerce, Business Efficiency, Digital Technology, Calicut District.

1. INTRODUCTION

The rapid growth of digital technologies has transformed business activities across the world. Small businesses increasingly depend on digital tools and internet-based platforms to improve operational efficiency, customer communication, financial management, and market expansion. The adoption of digital technologies such as online payment systems, social media marketing, e-commerce platforms, cloud-based applications, and digital communication tools has become essential for business survival and competitiveness.

Digitalization enables businesses to reduce operational costs, improve productivity, strengthen customer relationships, and access wider markets. In India, the expansion of internet services, smartphone penetration, and government initiatives promoting digital transformation have accelerated the adoption of digital technologies among small enterprises. Calicut district of Kerala is one of the major commercial and business centres where small businesses actively participate in trade, retailing, service activities, and entrepreneurship. Many businesses in the district have adopted digital technologies for communication, online sales, marketing, and payment systems. However, challenges such as financial limitations, technical skill gaps, and infrastructure constraints continue to affect digital adoption.

The present study attempts to analyse the impact of digitalization on small businesses in Calicut district and examine the opportunities and challenges associated with digital transformation.

2. STATEMENT OF THE PROBLEM

Digitalization has become an important component of modern business operations. Although digital technologies provide significant advantages such as improved efficiency, customer reach, and online business opportunities, many small businesses still face barriers in adopting digital tools effectively.

Small business owners often encounter problems related to limited financial resources, poor internet connectivity, lack of technical knowledge, cybersecurity concerns, and inadequate training opportunities. The level of digital adoption also differs depending on business type, educational background, and accessibility of digital infrastructure.

Therefore, the present study focuses on analysing the impact of digitalization on small businesses in Calicut district and identifying the major challenges affecting digital transformation.

3. OBJECTIVES OF THE STUDY

1. To analyse the level of digital technology adoption among small businesses.
2. To identify the major digital tools used in business operations.
3. To examine the impact of digitalization on business efficiency and revenue.
4. To identify the challenges faced in adopting digital technologies.

5. REVIEW OF LITERATURE

Robusta (2025)¹ analysed the impact of blockchain technology and smart contracts on digital entrepreneurial finance and observed that digital innovation significantly improves financial operations and business transparency.

Krishnan (2024)² identified that small and medium enterprises increasingly adopt smart manufacturing and digital technologies to improve operational performance and competitiveness.

Aravind (2024)³ studied digital literacy initiatives in Kerala and found that digital awareness positively influences technology adoption among small enterprises.

Agarwal, Malhotra, and Swami (2024)⁴ observed that post-COVID business environments accelerated digital transformation in supply chain management and online business activities.

Shajahan and Kareem (2021)⁵ highlighted the growing importance of hyperlocal e-commerce and digital market transformation in Kozhikode city.

Talwar and Talwar (2020)⁶ examined consumer resistance towards digital innovation and identified financial constraints and technical barriers as major challenges affecting digital adoption.

The literature reveals that digitalization positively influences business growth and operational efficiency, although several infrastructural and financial barriers continue to affect small business transformation.

6. RESEARCH METHODOLOGY

6.1 Research Design

The study follows a descriptive and analytical research design.

6.2 Area of Study

The study was conducted in Calicut.

6.3 Sources of Data

- **Primary Data**

Primary data were collected using structured questionnaires distributed among small business owners and employees.

- **Secondary Data**

Secondary data were collected from journals, books, reports, websites, and previous research studies related to digitalization and small businesses.

6.4 Sampling Technique

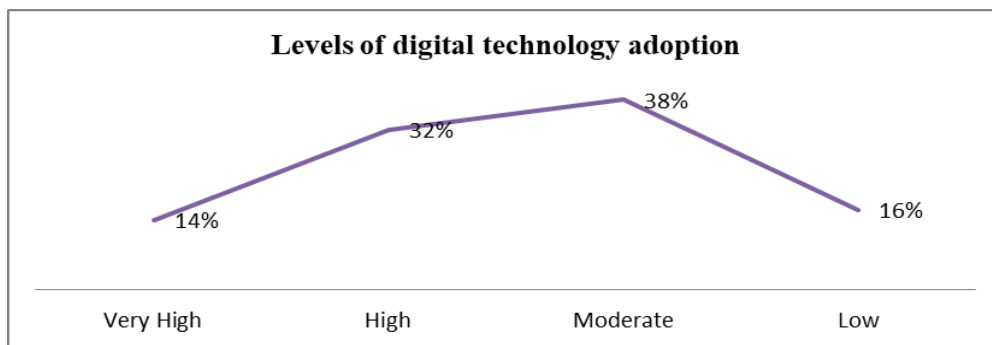
Convenience sampling method was adopted.

6.5 Sample Size

The study includes 100 respondents.

7. DATA ANALYSIS AND INTERPRETATION

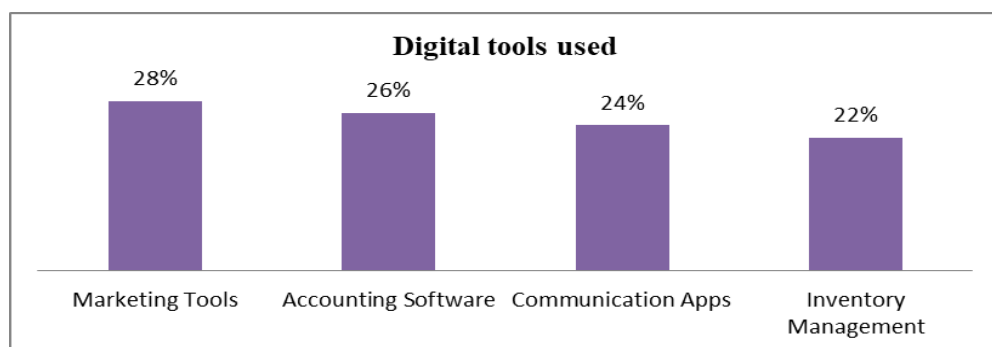
7.1 Levels of digital technology adoption



Interpretation

The table shows that the majority of respondents (38%) have a moderate level of digital technology adoption, followed by 32% with a high level. About 14% of respondents possess a very high level of adoption, while 16% have a low level.

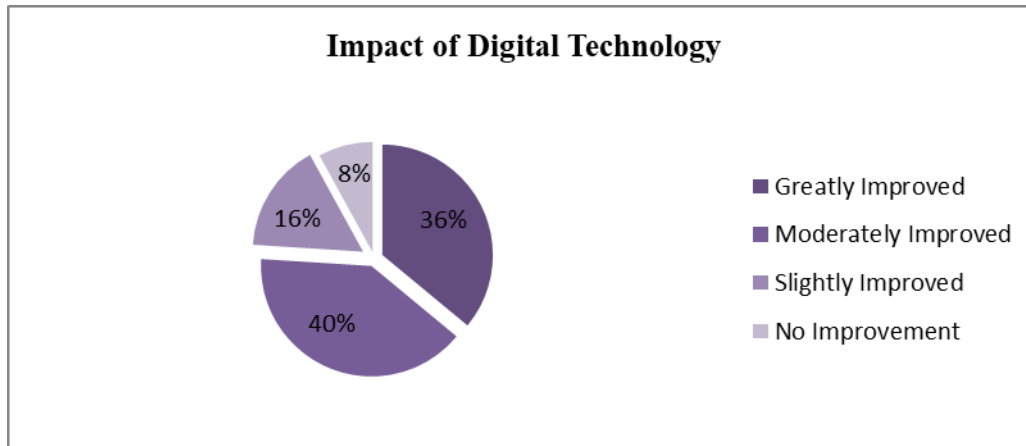
7.2 Digital tools used



Interpretation

The table shows that marketing tools are the most widely used digital tools among respondents, with 28%, followed by accounting software at 26%. Communication apps account for 24%, while inventory management tools are used by 22% of the respondents.

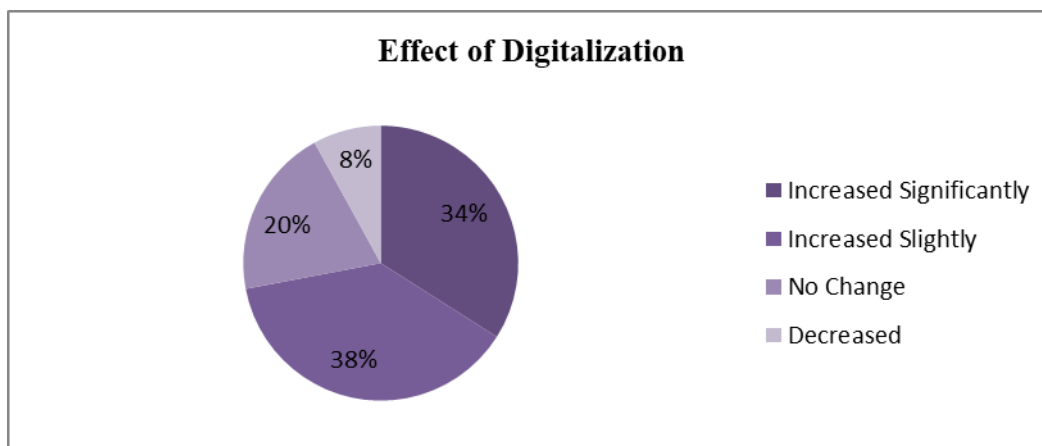
7.3 Impact of Digital Technology on Business Efficiency



Interpretation

The table shows that 40% of the respondents believe digital technology has moderately improved business efficiency, while 36% feel it has greatly improved efficiency. About 16% reported slight improvement, and only 8% stated that there was no improvement.

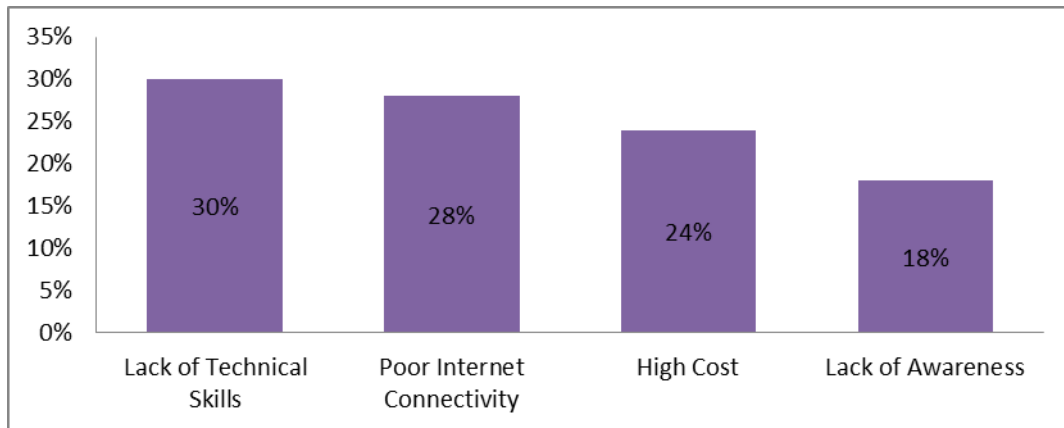
7.4 Effect of Digitalization on Business Revenue



Interpretation

The table shows that 38% of the respondents reported a slight increase in business revenue due to digitalization, while 34% experienced a significant increase. About 20% observed no change in revenue, and 8% reported a decrease.

7.5 Major Challenges in Adopting Digital Technology



Interpretation

The table shows that lack of technical skills is the major challenge in adopting digital technology, reported by 30% of the respondents. Poor internet connectivity accounts for 28%, followed by high cost at 24%, while 18% of the respondents identified lack of awareness as a challenge.

8. MAJOR FINDINGS

1. Most respondents actively use digital technologies in business operations.
2. Marketing tools and communication applications are widely adopted.
3. Digital technology improves business efficiency and productivity.
4. Digitalization positively influences business revenue.
5. Lack of technical skills is the major challenge affecting digital adoption.

9. SUGGESTIONS

1. Training programs should be organized to improve digital literacy among small business owners.
2. Government agencies should provide financial assistance and incentives for digital adoption.
3. Internet infrastructure and connectivity should be improved.
4. Businesses should invest in secure and reliable digital payment systems.
5. Awareness campaigns should be conducted regarding digital marketing and e-commerce opportunities.
6. Small businesses should adopt cloud-based accounting and inventory systems.
7. Technical support centres should be established for digital skill development.

10. CONCLUSION

The study concludes that digitalization has a significant positive impact on small businesses in Calicut district. The adoption of digital technologies improves business efficiency, customer communication, marketing effectiveness, and revenue generation.

Most respondents expressed positive perception towards digital transformation and recognized the importance of digital tools in improving business competitiveness and operational performance. However, technical skill gaps, financial limitations, and infrastructure-related issues continue to affect the adoption of digital technologies.

The findings indicate that digital transformation is essential for the sustainable growth and modernization of small businesses. Strengthening digital literacy, improving internet infrastructure, and providing financial support can further accelerate digital adoption among small enterprises.

REFERENCES

1. Robusta, C. D. S. (2025). Impact of blockchain technology and smart contracts on digital entrepreneurial finance and venture funding.
2. Krishnan, R. (2024). Smart manufacturing transformation and challenges faced by small and medium enterprises.
3. Aravind, S. (2024). Total digital literacy initiatives and their impact in Kerala.
4. Agarwal, P., Malhotra, S. K., & Swami, S. (2024). Adoption of smart technologies in supply chain management.
5. Wang, Y., & Yang, Y. (2023). Digital technologies and supply chain management.
6. Shajahan, A., & Kareem, F. (2021). Hyperlocal e-commerce and digital market transformation in Kozhikode.
7. Talwar, S., & Talwar, M. (2020). Consumer resistance to digital innovations.
8. Baiju, M. S. (2017). FinTech revolution and digitization of payments.