



A STUDY OF PROBLEMS HINDERING DIGITALIZATION IN SMALL AND MEDIUM BUSINESS

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Article DOI: <https://doi.org/10.36713/epra28724>
DOI No: 10.36713/epra28724

ABSTRACT

Small and Medium Enterprises (MSMEs) play a vital role in the economic development of India by generating employment, promoting entrepreneurship, and contributing significantly to national income. In recent years, digitalization has become an important factor for improving business efficiency, expanding market reach, and increasing competitiveness. Despite various government initiatives such as the Digital MSME Scheme and other digital support programs, many small and medium businesses are still slow in adopting digital tools. This study examines the major problems hindering digitalization in small and medium businesses in India. The research is based on a survey of 49 respondents, including business owners, managers, and employees from different sectors such as services, retail, and manufacturing across urban, semi-urban, and rural areas. A structured questionnaire was used to collect primary data, and the responses were analysed using simple statistical methods such as frequencies, percentages, and ranking. The findings show that most businesses are still using only basic digital tools such as UPI payments, WhatsApp, and email. The major barriers identified include confusion in selecting suitable digital tools, fear of cyber fraud, lack of awareness about government schemes, limited digital skills among owners and workers, and resistance to change from traditional systems. The Chi-square test results confirm that these barriers significantly hinder the adoption of digitalization in MSMEs. The study suggests practical solutions such as providing simple digital tools, improving awareness about government schemes, offering training in local languages, strengthening cyber security awareness, improving internet connectivity, and providing financial support. The study highlights the need for coordinated efforts from the government, technology providers, financial institutions, and educational organizations to support the digital transformation of MSMEs in India.

KEYWORDS: Digitalization, MSMEs, Small Business, Digital Adoption, Cyber Security, etc.

1. INTRODUCTION

Small and Medium Businesses (also known as MSMEs) are the backbone of the Indian economy. They create a large number of jobs and provide income to millions of people, especially in villages and small towns. These businesses contribute a big share to India's GDP and play a very important role in the country's economic growth.

In today's world, digitalization is very important for business success. Digitalization means using digital tools such as smartphones, internet, UPI payments, WhatsApp Business, online shops, accounting software, and cloud systems in daily business work. These tools can help businesses work faster, reduce mistakes, reach more customers, save time and money, and compete better with bigger companies.

The Government of India has launched many schemes and policies to support digitalization of small businesses. Some important policies include the Digital MSME Scheme, which provides financial assistance and technical support for adopting digital tools. Other schemes like MSME Champions, Credit Linked Capital Subsidy, and various digital training programs offer subsidies, low-cost loans, and guidance to help small businesses go digital. The government is also working to improve internet connectivity in villages and promote UPI and e-commerce platforms.

However, despite these government efforts, many small and medium businesses are still using only basic tools like UPI and WhatsApp, or continue with old paper-based methods.

Full digitalization is happening very slowly, especially in rural and semi-urban areas, including parts of Maharashtra.

This study focuses on the main problems that are stopping small and medium businesses in India from adopting digital tools fully. The research is based on a survey of 49 respondents, mostly business owners from services, retail, and manufacturing sectors across urban, semi-urban, and rural areas. This study will help understand the real challenges faced by small businesses and provide useful suggestions for business owners, government, and support organizations.

2. STATEMENT OF PROBLEMS

1. Many small businesses find it very difficult to choose and set up the right digital tools. They get confused by too many options and don't know which one is best for their work.
2. Small businesses often don't have enough money to buy computers, good internet, software, or training. They need to spend on daily needs first, so digital changes get delayed.
3. Many owners and workers do not know enough about how to use digital tools. This is especially true for older people and those in villages or small towns.
4. Businesses are afraid of online hacks, data theft, or losing money to fraud. They feel unsafe using digital tools and don't know how to protect themselves properly.



5. Almost no small businesses know about government help programs for going digital. They miss out on free training, money support, and easy guidance.
6. Old computers and old ways of keeping records do not work well with new digital tools. This makes everything slow, expensive, and hard to connect.
7. Owners and workers do not like to change from old methods (like using paper) to new digital ways. They feel uncomfortable or worried about making mistakes.
8. In many villages and small towns (including parts of Maharashtra), the internet is slow or not always available. Without good internet, businesses cannot use online selling, payments, or other digital tools properly.
9. Many businesses are not sure if going digital will really help them earn more money or grow. Without clear proof or simple examples, they think it is too risky.
10. There is very little simple, local help available like easy advice, ready-to-use tools, or training made for small businesses in their area. This makes it harder for them to start and continue going digital.

3. OBJECTIVES OF THE STUDY

1. To identify and explain the main problems that stop businesses, especially small and medium ones in India, from using digital tools fully.
2. To understand how these problems affect the daily work, growth, and competition of small and medium businesses.
3. To suggest easy and practical solutions so businesses can overcome these problems and go digital successfully.

4. HYPOTHESIS

H₀ (Null Hypothesis): The identified problems do not significantly hinder the full adoption and success of digitalization in small and medium businesses in India.

H₁ (Alternative Hypothesis): The identified problems significantly hinder the full adoption and success of digitalization in small and medium businesses in India.

5. RESEARCH METHODOLOGY

This part explains how the study was planned and carried out. It tells the reader about the methods used to collect information and analyses the problems stopping small and medium businesses from going digital.

5.1. Type of Research Design

This study uses a descriptive and exploratory research design. Descriptive research means the study describes the current situation as it is. Exploratory research means the study tries to explore and understand the main problems in a clear way.

The research is mostly quantitative. This means the study collected numbers and percentages from business owners to measure how serious each problem is. A small amount of qualitative information was also collected through open-ended comments. This design is suitable because the aim is to clearly

identify problems, understand their effects, and suggest practical solutions.

5.2. Data Collection

The study is based mainly on primary data. Primary data means fresh information collected directly from small and medium business owners for this research.

A structured questionnaire was used to collect this data. Some background information was taken from government reports and policies (secondary data) only for writing the Introduction and Statement of Problems.

The study follows a deductive approach. First, ten main problems were identified from general knowledge and government observations. Then these problems were tested by asking business owners directly through the survey.

5.3. Population and Sample of the Study

- **Population:** The study covers owners, proprietors, managers, and employees working in Micro, Small, and Medium Enterprises (MSMEs) in India. These businesses are from services, retail, manufacturing, and other sectors. Special focus was given to businesses in urban, semi-urban, and rural areas, including parts of Maharashtra.
- **Sample Size:** A total of 49 respondents participated in the survey.
- **Sampling Method:** Non-probability convenience sampling was used. This means respondents were chosen because they were easy to reach and willing to participate. Care was taken to include people from different business sizes (micro, small, medium), different locations (urban, semi-urban, rural), and different sectors.

5.4. Data Analysis Method

All collected data was entered into Microsoft Excel and analysed using simple statistical methods. Only descriptive statistics were used because the aim was to describe and understand the situation, not to test complex relationships.

The following methods were used for analysis:

- **Frequencies and Percentages:** Used to show the profile of respondents (Table No.1).
- **Agreement Level:** For each of the 10 problems, "Agree" and "Strongly Agree" responses were added together to calculate percentages. These percentages were used to rank the barriers from most serious to least serious (Table No.2).
- **Count and Percentage:** For solutions, the number of people who selected each option was counted and ranked (Table No.3).
- Simple ranking method was applied to show which problems and solutions were most important according to the respondents.

The hypotheses (H₀ and H₁) were evaluated based on the survey results. If a large percentage of respondents agreed with the problems, it supports the alternative hypothesis (H₁) that these problems significantly hinder digitalization.



5.5. Limitations of the Study

- The sample size is small (only 49 respondents), so the results cannot be applied to all MSMEs in India.

- The data is based on what respondents themselves reported, so there may be some personal bias in answers.

Even with these limitations, the study provides honest and practical insights directly from small business owners.

6. DATA ANALYSIS

Table No. 6.1
Respondent Profile

Category	Sub-Category	Count	Percentage
Role in Business	Owner / Proprietor	36	73.5%
	Manager / Employee	9	18.4%
	Other	4	8.2%
Business Size	Micro	8	16.3%
	Small	23	36.7%
	Medium	18	46.9%
Location	Urban area	25	51.0%
	Semi-urban area	9	18.4%
	Rural / Village area	15	30.6%
Main Sector	Services	24	49.0%
	Retail/Trade	12	24.5%
	Manufacturing	10	20.4%
	Other	3	6.1%
Business Age	Less than 5 years	20	40.8%
	5–10 years	13	26.5%
	More than 10 years	16	32.7%
Current Digital Tool Use	No digital tools	3	6.1%
	Basic tools (WhatsApp, UPI, email)	34	69.4%
	Moderate tools	7	14.3%
	Advanced tools	5	10.2%

(Source: Primary Data)

A total of 49 small and medium business owners and managers participated in this survey. The majority of the respondents (73.5%) were owners or proprietors of their businesses. Only 18.4% were managers or employees, while the remaining 8.2% belonged to the “other” category.

In terms of business size, nearly half of the respondents (46.9%) were from medium enterprises, followed by 36.7% from small enterprises, and 16.3% from micro enterprises. The businesses were spread across different locations. More than half (51.0%) operated in urban areas, 30.6% were located in rural or village areas, and 18.4% were in semi-urban areas. This gave a balanced representation from urban, semi-urban, and rural parts of India, including Maharashtra.

The survey covered different business sectors. Services sector had the highest share with 49.0%, followed by retail/trade at 24.5%, manufacturing at 20.4%, and others at 6.1%. Regarding the age of the businesses, 40.8% were less than 5 years old, 26.5% were between 5 to 10 years old, and 32.7% had been operating for more than 10 years.

When asked about their current use of digital tools, a large majority (69.4%) were using only basic tools such as WhatsApp, UPI payments, and email. Only 14.3% had adopted moderate tools, 10.2% were using advanced tools, and a small 6.1% were still running their business without any digital tools. This shows that most small and medium businesses are still at the early stage of digitalization.

Table No. 6.2
Major Barriers (Ranked by Agreement Level)

Rank	Barrier Statement (Abbreviated)	Agree + Strongly Agree	Neutral	Disagree + Strongly Disagree	Total Responses
1	Too many confusing options to choose & set up digital tools	67.3% (33)	16.3%	18.4% (8)	49
2	Fear of hacks, data theft, or fraud	67.3% (33)	6.1%	26.5% (13)	49
3	Lack of awareness of government schemes/subsidies	67.3% (33)	18.4%	14.3% (7)	49
4	Lack of digital skills/knowledge (esp. older people & villages)	61.2% (30)	8.2%	30.6% (15)	49
5	Lack of simple, local help/advice/training	55.1% (27)	22.4%	22.4% (11)	49
6	Old systems (paper/old computers) incompatible	59.2% (29)	14.3%	26.5% (13)	49



7	Resistance to change / discomfort with new methods	53.1% (26)	10.2%	36.7% (18)	49
8	Not sure if digitalization will increase profits/growth	51.0% (25)	14.3%	34.7% (17)	49
9	Lack of money for hardware, internet, software, training	44.9% (22)	16.3%	38.8% (19)	49
10	Poor/unreliable internet in villages/small towns	38.8% (19)	20.4%	40.8% (20)	49

(Source: Primary Data)

The survey revealed several important barriers that are stopping small and medium businesses from fully adopting digital tools. The three most serious problems, each agreed upon by 67.3% of the respondents, were: difficulty in choosing and setting up the right digital tools due to too many confusing options, fear of online hacks, data theft, and fraud, and lack of awareness about government schemes and subsidies for digitalization.

The next major barrier was lack of digital skills and knowledge among owners and workers, especially older people and those living in villages. This problem was supported by 61.2% of the respondents. Other significant barriers included incompatibility of old paper-based systems and old computers with new digital tools (59.2%), and lack of simple, local help, advice, or training (55.1%).

Resistance to change from traditional methods was reported by 53.1% of the respondents. Around 51.0% were not sure whether going digital would actually help them earn more profit or grow their business. Surprisingly, lack of money for buying hardware, internet, software, or training was supported by only 44.9% of the respondents. The least agreed barrier was poor or unreliable internet connection in villages and small towns, which was mentioned by 38.8% of the respondents.

Overall, the findings suggest that confusion in selecting tools, security concerns, and lack of awareness about government support are the biggest challenges, while financial constraints and internet issues are comparatively less pressing according to the business owners.

Table No. 6.3
Solutions Desired (Select All That Apply, Ranked by Count)

Rank	Solution	Count	Percentage
1	Easy-to-use ready-made digital tools designed for small businesses	26	53.1%
2	Government subsidies or low-cost loans for tools/internet	25	51.0%
3	Simple and cheap training programs in local language	25	51.0%
4	Better and cheaper internet in villages/small towns	25	51.0%
5	Local experts or advisors who can visit and help set up tools	20	40.8%
6	More awareness campaigns and success stories from similar businesses	18	36.7%
7	Other	5	10.2%

(Source: Primary Data)

When asked about the solutions that would help them adopt digital tools more easily, the respondents gave clear preferences. The most desired solution was the availability of easy to use, ready-made digital tools specially designed for small businesses. This option was selected by 53.1% of the respondents (26 out of 49).

Three other solutions received almost equal support. About 51.0% of the respondents wanted government subsidies or low-cost loans to buy digital tools and improve internet facilities. The same percentage (51.0%) asked for simple and cheap training programs conducted in local languages. Another 51.0% emphasized the need for better and cheaper internet services, especially in villages and small towns.

Other helpful solutions included support from local experts or advisors who could visit the business and help set up the tools (40.8%), and more awareness campaigns along with real success stories from similar small businesses (36.7%). Only 10.2% of the respondents suggested other ideas.

These responses clearly show that small and medium business owners want simple, affordable, and practical support such as ready-made tools, local-language training, financial help, and improved internet to successfully move towards digitalization.

Hypothesis Testing

H₀ (Null Hypothesis): The identified problems do not significantly hinder the full adoption and success of digitalization in small and medium businesses in India.

H₁ (Alternative Hypothesis): The identified problems significantly hinder the full adoption and success of digitalization in small and medium businesses in India.

To test the hypothesis of this study, the Chi-Square Test was applied to determine whether the identified barriers significantly hinder the adoption of digitalization in small and medium businesses.

The study collected responses from 49 respondents representing small and medium businesses from different sectors and locations. Each respondent answered 10 statements related to barriers to digitalization, resulting in a total of 490 responses (49 × 10).

For the purpose of hypothesis testing, the responses were grouped into two categories:

- **Agree** (Agree + Strongly Agree)
- **Not Agree** (Neutral + Disagree + Strongly Disagree)

From the survey data, 277 responses were recorded under the Agree category, while 213 responses were recorded under the Not Agree category.



Under the null hypothesis, it is assumed that the barriers do not significantly affect digitalization. Therefore, the expected responses would be equally distributed between agreement and non-agreement categories. Based on the total responses (490), the expected frequency for each category is 245.

Using the Chi-Square formula:

$$\chi^2 = \sum (O - E)^2 / E$$

the calculated Chi-Square value was 8.36. The degrees of freedom (df) for the test were 1, and the critical value at the 5% level of significance is 3.84.

Since the calculated Chi-Square value (8.36) is greater than the critical value (3.84), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

This result indicates that the identified barriers significantly hinder the adoption and successful implementation of digitalization in small and medium businesses. The findings confirm that issues such as confusion in selecting digital tools, fear of cyber fraud, lack of awareness about government schemes, limited digital skills, and resistance to change play a major role in slowing down the digital transformation of MSMEs.

7.FINDINGS

1. The study found that 73.5% of the respondents were owners or proprietors of their businesses. This indicates that most responses came directly from decision-makers who are responsible for adopting or rejecting digital tools in their businesses.
2. Among the surveyed businesses, 46.9% were medium enterprises and 36.7% were small enterprises, while only 16.3% were micro enterprises. This shows that even relatively larger MSMEs still face barriers in adopting digital technologies.
3. The respondents represented different locations, including 51.0% from urban areas, 18.4% from semi-urban areas, and 30.6% from rural areas. This indicates that the study covered a balanced mix of business environments, including villages and smaller towns.
4. The highest proportion of respondents (49.0%) were from the services sector, followed by retail/trade (24.5%) and manufacturing (20.4%). This suggests that digitalization issues affect a wide range of sectors.
5. The results show that 69.4% of businesses use only basic digital tools such as WhatsApp, UPI payments, and email. Only 14.3% use moderate digital tools and 10.2% use advanced tools, while 6.1% still operate without any digital tools. This indicates slow progress in full digital transformation among MSMEs.
6. About 67.3% of respondents agreed that it is difficult to choose and set up suitable digital tools because there are too many options and not enough guidance. This confusion prevents many businesses from starting the digitalization process.
7. A significant 67.3% of respondents expressed fear of online hacks, data theft, and fraud. Many businesses feel unsafe using digital platforms because they lack knowledge about cyber security protection.
8. Another 67.3% of respondents reported that they are unaware of government schemes, subsidies, or training programs designed to support digitalization. As a result,

many MSMEs miss opportunities for financial assistance and guidance.

9. The study found that 61.2% of respondents believe that lack of digital knowledge among owners and employees is a major barrier. This issue is especially common among older business owners and those operating in rural areas.
10. About 59.2% of respondents agreed that old record-keeping systems and outdated computers do not work well with modern digital tools. This incompatibility makes digital adoption more difficult and costly.
11. Around 53.1% of respondents reported that business owners and workers feel uncomfortable changing from traditional paper-based systems to digital methods, mainly due to fear of making mistakes.
12. About 51.0% of respondents were unsure whether digitalization would actually increase profits or help their business grow. Without clear examples of success, many businesses hesitate to invest in digital tools.
13. Only 44.9% of respondents agreed that lack of money for hardware, software, internet, or training is a major problem. This suggests that knowledge and awareness issues may be more important barriers than financial constraints.
14. Poor or unreliable internet services were reported by 38.8% of respondents, especially those located in rural and semi-urban areas. Although it is a challenge, it was not ranked as the most serious barrier.
15. The most desired solution, chosen by 53.1% of respondents, was the availability of easy-to-use digital tools designed specifically for small businesses.
16. About 51.0% of respondents requested government subsidies or low-cost loans, simple training programs in local languages, and better internet connectivity to support digital adoption.
17. Around 40.8% of respondents wanted help from local experts who can guide them in setting up digital tools, while 36.7% suggested more awareness campaigns and real success stories from similar businesses.
18. The Chi-Square test result ($\chi^2 = 8.36$) was higher than the critical value (3.84), leading to rejection of the null hypothesis. This confirms that the identified barriers significantly hinder the adoption and success of digitalization in small and medium businesses.

8.SUGGESTIONS

1. Technology companies and software developers should design ready made digital solutions that are simple, affordable, and specifically suited for small businesses. These tools should require minimal technical knowledge so that owners and workers can easily understand and use them in daily business activities.
2. Government agencies should conduct awareness campaigns, workshops, and information drives to inform small business owners about available schemes, subsidies, and training programs related to digitalization. Information should be shared through local business associations, banks, and digital platforms.
3. Training programs should be organized regularly to improve digital skills among business owners and employees. These training sessions should be conducted



- in local languages and focus on practical demonstrations of tools such as digital payments, online marketing, accounting software, and e-commerce platforms.
4. Many businesses fear online fraud and cyber attacks. Therefore, government agencies, banks, and technology companies should provide simple guidelines and awareness programs on safe digital practices such as password protection, fraud prevention, and secure online transactions.
 5. Local digital advisors or technical support centers should be established where business owners can receive guidance on selecting and setting up digital tools. Experts could visit businesses and help them implement digital systems step by step.
 6. The government and financial institutions should offer subsidies, grants, or low-interest loans to help small businesses purchase computers, internet services, and digital software. This financial support would encourage more businesses to invest in digital transformation.
 7. Sharing real examples of small businesses that have successfully adopted digital tools can motivate other entrepreneurs to follow similar practices. These success stories can be shared through media, training programs, and business events.
 8. Better and more reliable internet connectivity is essential for digital business activities. Government authorities and telecom companies should continue improving internet coverage and reducing internet costs in villages and small towns.
 9. Businesses should be encouraged to adopt digital tools step by step rather than changing everything at once. For example, they can begin with digital payments and simple accounting software before moving to advanced tools like online stores and cloud systems.
 10. Universities, training institutes, and industry organizations can work together to provide digital training, research support, and technology guidance to small businesses. Such collaboration can make digital adoption easier and more sustainable.
 11. Since many businesses still rely on paper records, simple digital bookkeeping systems should be promoted. These systems should allow easy migration from paper records to digital formats without complex processes.
 12. Business owners and employees should regularly update their knowledge about new technologies and digital tools. Continuous learning will help businesses stay competitive and adapt to the rapidly changing digital environment.
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