The Repercussions of Technological Advancements on the Performance of MSME Workers in Hosur

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DOI: https://doi.org/10.51244/IJRSI.2026.1303000215

Received: 01 April 2026; Accepted: 07 April 2026; Published: 17 April 2026

ABSTRACT

The capacity of workers in Micro, Small, and Medium-Sized Enterprises (MSMEs) to adjust to technological advances is the main emphasis of this study. MSMEs are essential to economic growth and job creation, but workers frequently deal with issues including inadequate training, low pay, and a lack of organisational support. The study's objectives are to examine job satisfaction, skill levels, working circumstances, technical awareness, and the challenges employees encounter while adjusting to new technology. Using a structured questionnaire, 50 MSME employees provided primary data for the study, which was bolstered by secondary sources. The results show that even while the majority of workers are aware of technological advancements, there is a lack of training and skill development, which makes adaption rather challenging. The exploration comes to the conclusion that boosting employee performance and guaranteeing the long-term expansion of MSMEs require stronger training programs, skill development, and support systems.

Keywords: MSMEs, Employees, Technological Adaptation, Skill Development, Training, Job Satisfaction, Productivity, Digitalization, Workforce Performance, Economic Growth

INTRODUCTION

MSMEs, or micro, small, and medium-sized enterprises, are vital to a nation's economic growth, especially in developing nations like India. MSME workers are the backbone of this industry, making substantial contributions to innovation, production, and job creation. These workers are employed in a variety of sectors, including manufacturing, services, commerce, and technology, frequently in settings with limited resources.

MSME workers are renowned for their flexibility, capacity for multitasking, and deep engagement with company operations. MSMEs, in contrast to large firms, generally possess smaller teams, necessitating that workers assume a variety of tasks and responsibilities. Their practical skills, decision-making ability, and entrepreneurial perspective are all improved by this experience.

However, compared to workers in large companies, MSME employees also suffer a number of difficulties, such as restricted exposure to training and development, unstable employment, lower pay, and fewer benefits. They provide a substantial contribution to economic resilience and production in spite of these limitations.

MSME workers must constantly improve their skills and adjust to shifting work settings in the context of globalisation and rapid technology improvements. They play a critical role in promoting inclusive economic development, boosting competitiveness, and maintaining company growth.

Statement of the Problem

Micro, Small, and Medium-Sized Businesses (MSMEs) are important for economic growth and job creation. Nevertheless, while acknowledging their significance, workers in MSMEs face a number of significant obstacles that impede their personal and organisational development. One of the main issues is the scarcity of training and

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue III March 2026

development opportunities, which limits workers' capacity to improve their abilities and adjust to quickly evolving technology surroundings.

Additionally, MSME workers frequently deal with problems including poor pay, job insecurity, a lack of opportunity for professional progression, and bad working environment. These issues are made worse by the lack of formal employee welfare programs and human resource policy. Employee work satisfaction, motivation, and productivity may suffer as a result.

The incapacity of MSME personnel to successfully adjust to technological changes has become a significant worry in the present era of digital transformation and global competition. Many MSMEs lack the infrastructure and resources needed to promote employee growth and digital adoption. As a result, there is a discrepancy between the workforce's abilities and those needed by the sector.

Therefore, in order to determine appropriate measures for enhancing employee performance and guaranteeing the sustainable growth of MSMEs, it is necessary to critically examine the issues faced by MSME employees, particularly in relation to skill development, job satisfaction, and adaptation to technological changes.

Objectives of the Study

1. To assess employees' job satisfaction and working conditions in Micro, Small, and Medium-Sized Enterprises (MSMEs).
2. To assess MSME employees' understanding, acceptance, and difficulties with technological advancements.
3. To determine skill shortages and make recommendations for ways to improve employee performance, training, and flexibility in MSMEs.

Scope of the Study

The capacity of workers in Micro, Small, and Medium Enterprises (MSMEs) to adjust to technological changes in the workplace is the main topic of this study. It addresses important topics including job satisfaction, personnel skills, training and development, and how technology affects performance. The study also looks at employees' understanding of and usage of contemporary tools as well as the difficulties they encounter, such as a lack of technical expertise, inadequate training, and a lack of organisational support. The scope is restricted to a certain geographic region and is mostly based on primary data gathered via questionnaires with secondary sources for support. The study's goal is to offer practical recommendations for enhancing worker productivity and flexibility, however because industry and technology adoption vary, the results could not apply to all industries.

Importance of the Study

This research is significant because it examines the opportunities and difficulties that workers in MSMEs, or micro, small, and medium-sized encounter, especially when it comes to adjusting to technological advancements. Understanding employee-related concerns including skill shortages, training needs, and work satisfaction is crucial for increasing productivity and performance since MSMEs play a major role in employment and economic growth. The results of this research will aid workers improve their technical abilities, support politicians in creating better development initiatives, and help businesses execute efficient management and training procedures. In general, the research helps to ensure the MSME sector's sustainable expansion and strengthens the workforce.

Limitations of the Study

- The study's limited geographic scope limits its broader usefulness.
- Due to time and budget limitations, a small sample size was employed.
- The primary data used in the study was gathered via questionnaires, which may contain respondent bias.
- Only specific factors were taken into account, including work satisfaction, training, skills, and technology adaption.
- The breadth and complexity of the study were impacted by time and budgetary limitations.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue III March 2026

REVIEW OF LITERATURE

Kumar, R. (2022) examined the increasing role of digitalization in MSMEs and found that employee adaptability to new technologies significantly influences organizational performance. The study highlighted that lack of digital literacy and insufficient training remain key challenges for MSME employees.

Sharma, P. and Jain, V. (2021) studied the impact of skill development initiatives in MSMEs and concluded that structured training programs improve employee efficiency, job satisfaction, and technological adaptability.

Kumar, R. (2020) analyzed digital transformation in MSMEs and emphasized that continuous skill upgradation is necessary for employees to cope with technological advancements. The study pointed out that awareness and accessibility to training programs are still limited.

Gupta, S. and Verma, A. (2019) focused on employee performance in MSMEs and found that working conditions, motivation, and access to modern tools directly influence productivity and job satisfaction.

Singh, R. K. and Garg, S. K. (2017) emphasized that training and development programs play a crucial role in improving employee performance. Their study revealed that trained employees are more adaptable to technological changes.

Das, K. (2016) highlighted that MSME employees often face job insecurity and lack of formal HR practices, which negatively affect their morale and long-term commitment to the organization.

Bala Subrahmanya, M. H. (2011) analyzed technology adoption in Indian MSMEs and observed that financial limitations and lack of skilled manpower slow down technological progress, affecting employee productivity.

Ayyagari, M., Beck, T., and Demirgüç-Kunt, A. (2007) discussed the contribution of MSMEs to employment and identified poor working conditions and lack of job security as major concerns impacting employees.

Beck, T., Demirgüç-Kunt, A., and Levine, R. (2005) highlighted structural challenges such as limited access to finance, which indirectly restrict employee training, development, and technological adoption in MSMEs.

RESEARCH METHODOLOGY

The methodical procedure utilised to gather, examine, and evaluate data for the study is referred to as the research methodology. The workers of Micro, Small, and Medium-Sized Enterprises (MSMEs) are the subject of this study, specifically with regard to how they have adapted to technological advancements.

Research Design:

In order to characterise the traits, problems, and behaviour of MSME employees with relation to their abilities advancement, job happiness, and technological adaption, the study uses a descriptive research approach.

Sources of Data:

Both **primary and secondary data** are used for the study.

- Primary data is collected directly from MSME employees through structured questionnaires and personal interactions.
- Secondary data is gathered from journals, books, government reports, websites, and previous research studies related to MSMEs.

Sampling Method:

In order to characterise the traits, problems, and behaviour of MSME employees with relation to their abilities advancement, job happiness, and technological adaption, the study uses a descriptive research approach.

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Sample Size:

A sample of **50employees** working in MSMEs is considered for the study.

Data Collection Tools:

A structured **questionnaire** is used as the main tool for collecting primary data. The questionnaire includes both closed-ended and open-ended questions related to employee skills, training, technological awareness, and job satisfaction.

Data Analysis Techniques:

The collected data is analyzed using simple statistical tools such as percentage analysis, tables, and charts to interpret the findings clearly.

Study Area:

The study is confined to MSME workers in the Tamil Nadu city of Hosur.

Data Analysis and Interpretation

Table 1: Age Distribution

Age Group	Respondents	Percentage (%)
18–25	8	16%
26–35	22	44%
36–45	20	40%
Total	50	100%

Source: Primary Data

Interpretation

The above table shows the age distribution of MSME employees. It is observed that the majority of respondents (44%) belong to the 26–35 age group, followed by 36–45 years (40%), while only 16% fall under the 18–25 age group. This indicates that most employees in MSMEs are in their prime working age, possessing experience and stability. The lower percentage of younger employees suggests limited entry-level participation. Overall, the data reflects that MSMEs are largely supported by a mature and experienced workforce.

Table 2: Gender

Gender	Respondents	Percentage (%)
Male	30	60%
Female	20	40%
Total	50	100%

Source: Primary Data

Interpretation:

The bar chart illustrates the gender distribution of respondents in the study. It shows that out of 50 participants, 30 are male and 20 are female, indicating that male respondents (60%) form the majority compared to female respondents (40%). This suggests a slight gender imbalance in the sample, with higher representation of male employees. However, the presence of a considerable proportion of female respondents ensures that the data still reflects perspectives from both genders, allowing for meaningful comparison in analyzing adaptation to technological changes among IT employees.

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Table 3: Marital Status

Status	Respondents	Percentage (%)
Single	20	40%
Married	30	60%
Total	50	100%

Source: Primary Data

Interpretation:

The data shows that out of 50 respondents, 30 (60%) are married and 20 (40%) are single, indicating that married employees form the majority of the sample. This suggests that most participants may have additional family responsibilities, which could influence their time and ability to adapt to technological changes. However, the presence of a significant proportion of single respondents ensures that the study includes diverse perspectives, allowing for a meaningful comparison of how marital status affects adaptability among IT employees.

Table 4: Educational Qualification

Qualification	Respondents	Percentage (%)
School	12	24%
Diploma	10	20%
UG	20	40%
PG	8	16%
Total	50	100%

Source: Primary Data

Interpretation:

The above table shows the educational qualification of MSME employees. It is observed that the majority of respondents (40%) are **Undergraduates (UG)**, followed by **School level (24%)** and **Diploma holders (20%)**, while **Postgraduates (16%)** constitute the smallest group. This indicates that MSMEs mainly employ individuals with moderate educational qualifications. The lower percentage of highly qualified employees suggests limited demand for advanced academic qualifications in this sector.

Table 5: Monthly Income

Income Level	Respondents	Percentage (%)
Below ₹10,000	12	24%
₹10k–₹20k	12	24%
₹20k–₹30k	18	36%
Above ₹30k	8	16%
Total	50	100%

Source: Primary Data

Interpretation:

The table shows that the highest number of respondents (36%) fall under the ₹20,000–₹30,000 income group. Both the below ₹10,000 and ₹10,000–₹20,000 categories account for 24% each, while only 16% of employees earn above ₹30,000. This indicates that most MSME employees earn a moderate level of income, with relatively fewer employees in the higher income category. The findings suggest that income levels in MSMEs are generally average, with limited high-earning opportunities.

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Table 6: Technology Awareness

Response	Respondents	Percentage (%)
Yes	35	70%
No	15	30%
Total	50	100%

Source: Primary Data

Interpretation:

The table shows that a majority of respondents (70%) are aware of technological changes in their workplace, while only 30% are not aware. This indicates a high level of technological awareness among MSME employees. It reflects that most employees are exposed to modern tools and digital systems, which is a positive sign for organizational growth and adaptability.

Table 7: Training Received

Response	Respondents	Percentage (%)
Yes	25	50%
No	25	50%
Total	50	100%

Source: Primary Data

Interpretation:

The table shows that 50% of respondents have received training, while the remaining 50% have not received any training. This indicates an equal distribution between trained and untrained employees. It highlights a significant gap in training and development programs in MSMEs, suggesting the need for more structured and widespread training initiatives to improve employee skills and adaptability.

Table 8: Skill Level

Level	Respondents	Percentage (%)
High	22	44%
Moderate	18	36%
Low	10	20%
Total	50	100%

Source: Primary Data

Interpretation:

The table shows that the majority of respondents (44%) possess a **high level of skills**, followed by 36% with a moderate level, while only 20% have low skill levels. This indicates that most MSME employees are relatively skilled and capable of handling their job responsibilities. However, a considerable proportion still falls under moderate and low skill levels, suggesting the need for further training and development programs to enhance overall employee competency.

Table 9: Problems in Adapting Technology

Level	Respondents	Percentage (%)
High	15	30%
Moderate	20	40%
Low	15	30%
Total	50	100%

Source: Primary Data

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Interpretation:

The table indicates that the highest number of respondents (40%) experience **moderate difficulty** in adapting to technological changes, while equal percentages (30% each) face high and low levels of difficulty. This suggests that although many employees are somewhat able to cope with technological changes, a significant portion still faces challenges. It highlights the need for improved training and organizational support to ease the adaptation process.

Table 10: Job Satisfaction

Level	Respondents	Percentage (%)
Satisfied	25	50%
Neutral	15	30%
Dissatisfied	10	20%
Total	50	100%

Source: Primary Data

Interpretation:

The table shows that half of the respondents (50%) are **satisfied** with their jobs, while 30% feel neutral and 20% are dissatisfied. This indicates that although a majority of employees are satisfied, a considerable portion remains either uncertain or unhappy with their job conditions. It suggests that MSMEs need to improve working conditions, benefits, and support systems to enhance overall employee satisfaction.

Table 11: Gender vs Stress Level

Gender	High Stress	Moderate Stress	Low Stress	Total
Male	10	14	6	30
Female	8	9	3	20
Total	18	23	9	50

Source: Primary Data

Interpretation:

The table shows that both male and female employees experience moderate stress the most. However, male employees (14) report slightly higher moderate stress compared to females (9). High stress levels are also significant among both groups, indicating that stress is a common issue across genders in MSMEs.

Table 12: Income vs Job Satisfaction

Income Level	Satisfied	Neutral	Dissatisfied	Total
Below ₹10,000	3	4	5	12
₹10k–₹20k	4	5	3	12
₹20k–₹30k	12	5	1	18
Above ₹30k	6	1	1	8
Total	25	15	10	50

Source: Primary Data

Interpretation:

The table indicates that employees with higher income levels (₹20,000 and above) show greater job satisfaction. In contrast, employees earning below ₹10,000 report higher dissatisfaction. This suggests that income plays a key role in determining job satisfaction among MSME employees.

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ANALYSIS & DISCUSSION

The examination of information gathered from fifty MSME workers offers insightful information on their skill levels, job satisfaction, technology savvy, and demographics.

The age distribution reveals that the majority of workers (44%) are between the ages of 26 and 35, suggesting that MSMEs are primarily supported by a youthful and engaged workforce. Although female involvement (40%) is equally noteworthy, the gender distribution shows that 60% of responders are men, indicating a male-dominated workforce.

The fact that 60% of workers are married may have an impact on their demand for steady pay and job stability. According to data on educational qualifications, the majority of MSME workers (40%) are students in undergraduate programs, followed by school-level and a diploma holders, indicating a modest level of education.

The bulk of employees (36%) make between ₹20,000 and ₹30,000, according to income study, reflecting average earning levels. Financial limitations are highlighted by the fact that a sizable portion still falls into lower income levels.

70% of workers are aware of technical advancements, which is encouraging for modernisation. Only 50% of workers have gotten formal training in spite of this, indicating a large disparity among the consciousness and enhancement of skills. The skill level study further illustrates this disparity, showing that while 44% of respondents claim having excellent abilities, a sizable number still have moderate or poor skill levels.

According to the report, 30% of workers have considerable difficulty adjusting to new technology, while 40% have moderate trouble. This implies that many employees still struggle with technological adaption, primarily as a result of inadequate training and assistance.

Just 50% of workers are happy with their jobs; the other responses have either ambivalent or displeased. This suggests that aspects like organisational support, employee perks, and working conditions need to be improved.

Overall, the conversation shows that although MSME workers exhibit strong awareness of the desire to adjust to technological advances, their full potential is limited by inadequate training, modest skill levels, and obstacles relating to their jobs. Optimising staff efficiency and raising MSMEs' productivity require addressing these problems.

Findings of the Study

1. The majority of MSME employees (44%) belong to the age group of 26–35 years, indicating a young workforce.
2. Male employees (60%) are higher compared to female employees (40%).
3. Most respondents (60%) are married, showing higher financial responsibilities.
4. A significant number of employees (40%) are undergraduates, reflecting moderate educational levels.
5. The majority (36%) earn between ₹20,000–₹30,000, indicating average income levels.
6. About 70% of employees are aware of technological changes in their workplace.
7. Only 50% of employees have received training, showing a gap in skill development.
8. Around 44% of employees possess high skill levels, while others have moderate or low skills.
9. Most employees (40%) face moderate difficulty in adapting to new technologies.
10. Only 50% of employees are satisfied with their jobs, while others are neutral or dissatisfied.

CONCLUSION

According to the study's findings, MSME workers are young, have a modest level of education, and are somewhat tech-savvy. However, because of inadequate training and development programs, there is a glaring gap between awareness and actual implementation. Even if a large number of workers have moderate to high skill levels, they nevertheless have trouble adjusting to new technology. Furthermore, employment satisfaction is just mediocre, which highlights the need for better conditions for workers and support for staff. All things

considered, boosting employee performance and guaranteeing the long-term expansion of MSMEs depend on better training, technology exposure, and HR procedures.

Suggestions

1. MSMEs should provide regular and structured training programs to improve employee skills.
2. Organizations must promote continuous learning and digital literacy among employees.
3. Management should create a supportive environment to reduce resistance to technological changes.
4. Proper HR policies, including fair wages, incentives, and job security, should be implemented.
5. Government initiatives should be made more accessible and practical for MSME employees.
6. MSMEs should adopt modern technologies and tools to improve efficiency.
7. Regular employee feedback should be collected to identify and solve workplace issues.

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