A Study on Training Methods and Challenges Faced by Employees in The Interior Manufacturing Industry

K Dhanya[1], Mrs. Akshatha Shetty[2]
[1,2]*Alva's college (Autonomous), Moodubidre*

***Abstract*—This study examines the training methods adopted in the interior manufacturing industry and the challenges faced by employees during the training process. Employee training plays a crucial role in improving technical skills, productivity, quality standards, safety awareness, and overall organizational performance. The research is based on primary data collected through a structured questionnaire from employees and supported by secondary data from books, journals, company records, and online sources. The study evaluates the effectiveness of various training methods and their impact on production performance. Findings reveal that training significantly enhances machine-handling skills, reduces production errors, improves problem-solving abilities, increases adaptability to new technologies, and contributes to higher quality standards. Chi-square analysis confirms a significant relationship between training and production performance. The study also identifies major challenges faced by interior manufacturing companies, including skilled labour shortages, employee turnover, machinery breakdowns, raw material delays, financial constraints, communication barriers, and resistance to technological change. The study concludes that continuous and well-structured training programs are essential for improving employee performance, operational efficiency, and long-term organizational growth in the interior manufacturing industry.**

***Index Terms*—Employee Training, Interior Manufacturing Industry, Training Effectiveness, Production Performance, Skill Development, Employee Productivity**

I. INTRODUCTION

The interior manufacturing industry has become an important segment of the modern industrial and construction ecosystem, contributing significantly to economic development and improved living standards. This sector primarily focuses on the production of furniture, modular interiors, fixtures, and customized design solutions for residential, commercial, and industrial spaces. With the rapid growth of urbanization and changing customer preferences, there is an increasing demand for high-quality, innovative, and sustainable interior products. As a result, interior manufacturing companies are required to maintain high standards of efficiency, precision, and adaptability, which largely depend on the skills and competencies of their workforce.

In this context, employee training has emerged as a critical function for organizational success. Training helps employees acquire the necessary technical knowledge, practical skills, and behavioural competencies required to perform their roles effectively. In interior manufacturing, workers are often involved in complex processes such as machine operations, material handling, design interpretation, and quality control. Therefore, proper training ensures not only improved productivity but also enhanced product quality, reduced wastage, and better workplace safety. It also enables employees to keep pace with technological advancements and evolving industry practices.

Over the years, training methods in the manufacturing sector have evolved significantly. Traditional approaches such as on-the-job training, apprenticeships, and mentoring continue to be widely used due to their practical nature and direct relevance to job tasks. At the same time, modern training techniques such as e-learning, simulation-based training, workshops, and skill development programs are gaining importance. These methods provide structured learning experiences and help organizations train employees more efficiently. The integration of technology in training has further improved accessibility and flexibility, allowing employees to learn at their own pace.

Despite the availability of various training methods, interior manufacturing companies face several challenges in implementing effective training programs. One of the major challenges is the shortage of skilled labor, which compels organizations to invest significant time and resources in basic training. Additionally, high employee turnover disrupts the continuity of training efforts and increases organizational costs. Many companies also face limitations in terms of training infrastructure, financial resources, and availability of qualified trainers.

Another important challenge is the resistance to change among employees. Workers who are accustomed to traditional methods may find it difficult to adapt to new technologies or advanced training techniques. Furthermore, differences in educational background, language barriers, and varying levels of learning ability among employees can affect the overall effectiveness of training programs. Time constraints due to production targets and deadlines also limit the opportunity for comprehensive training, often leading to incomplete skill development.

Moreover, evaluating the effectiveness of training programs remains a complex issue for many organizations. Without proper assessment mechanisms, it becomes difficult to measure the impact of training on employee performance and organizational productivity. This lack of evaluation can result in inefficient training practices and reduced return on investment.

Therefore, it is essential to study the training methods adopted by interior manufacturing companies and the challenges faced by employees during the training process. Such a study will help identify gaps in existing practices and provide valuable insights for improving training strategies. By addressing these challenges and adopting effective training methods, organizations can enhance employee performance, achieve operational efficiency, and ensure long-term growth in a competitive industrial environment.

II. LITERATURE REVIEW

1. Author: Cazeri, G., Bittencourt, V., & others (2022)
Title: Training for Industry 4.0: A Systematic Literature Review and Directions for Future Research
This study focuses on how training practices are evolving in modern manufacturing due to Industry 4.0 technologies. The authors highlight that with the introduction of automation, artificial intelligence, and digital tools, employees are required to continuously upgrade their skills. The study emphasizes that traditional training methods alone are no longer sufficient, and organizations must adopt more flexible and technology-based learning approaches. However, the research also points out several challenges such as lack of skilled trainers, resistance to change among employees, and insufficient infrastructure for advanced training. This study is relevant as interior manufacturing industries are also gradually adopting modern technologies, making continuous training essential.

2. Author: Knoke, B., Gorldt, C., & Thoben, K. D. (2019)
Title: Literature Review on Training Simulators in Manufacturing Processes
This paper examines the use of simulation-based training in manufacturing industries. According to the study, training simulators help employees learn complex processes in a safe and controlled environment, reducing errors and improving efficiency. It also enhances practical understanding, which is crucial in manufacturing sectors. However, the study highlights that many companies face challenges in implementing such modern training methods due to high costs, lack of awareness, and limited technical expertise. As a result, industries often continue using traditional training methods, which may not always be effective in today's competitive environment.

3. Author: Bhatia, N., & Shrivastava, S. (2022)
Title: Cross-Training and Its Impact on Employees in Manufacturing Industry
This study explores the concept of cross-training, where employees are trained to perform multiple roles within the organization. The authors found that cross-training improves employee flexibility, productivity, and job satisfaction. It also helps organizations handle workforce shortages and reduces dependency on specific workers. However, the study identifies challenges such as increased workload, employee resistance, and time constraints for training. These findings are particularly useful for interior manufacturing companies, where employees often need to handle multiple tasks and adapt to changing work requirements.

4. Author: Tortorella, G. L., Fogliatto, F. S., & others (2022)
Title: Impact of Training and Development on Lean Manufacturing Implementation
This research focuses on the role of training in the successful implementation of lean manufacturing practices. The study reveals that proper training significantly improves employees' understanding of lean concepts and enhances organizational performance. However, the authors also highlight major challenges such as lack of management support, poor communication, and insufficient training programs. Without effective training, employees find it difficult to adapt to new systems and processes. This is highly relevant to interior manufacturing industries where process efficiency and waste reduction are critical.

5. Author: Singh, R., Nandan, T., & Singh, S. (2021)
Title: Employee Perception Towards Training and Development in Manufacturing Sector
This study examines how employees perceive training programs in manufacturing organizations. The findings suggest that although companies provide training, many employees feel that the programs are not practical or directly related to their job roles. The study highlights the importance of designing need-based and job-oriented training programs. It also points out challenges such as lack of employee engagement, ineffective training methods, and absence of proper evaluation systems. These issues reduce the overall effectiveness of training initiatives and impact employee performance.

III. RESEARCH METHODOLOGY

Primary data for the study was collected from employees through a structured questionnaire and direct interaction. Secondary data was obtained from company records, books, journals, and relevant online sources to support the analysis.

IV. OBJECTIVES

- To identify the challenges faced by company during interior manufacturing.
- To understand Impact of training methods.

V. LIMITATIONS OF THE STUDY

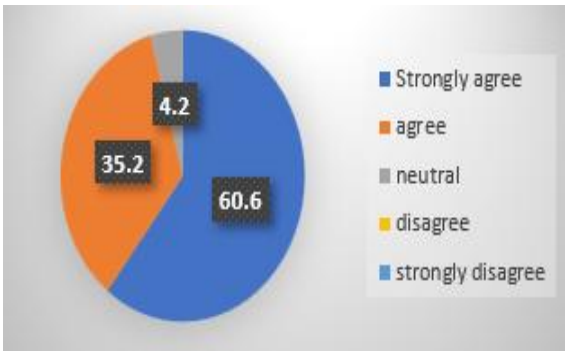
- The study was limited to a selected number of employees, so the findings may not represent the entire industry.
- Time constraints restricted detailed data collection and analysis.
- The study relied mainly on employee responses, which may include personal bias or inaccurate opinions.
- The research was conducted only in the interior manufacturing industry, so the results may not be applicable to other industries.

VI. IMPACT OF TRAINING METHOD ON EMPLOYEES

Training methods have a direct and significant impact on employee performance and organizational success in the interior manufacturing industry. Effective training methods help employees develop the required technical skills, improve their understanding of processes, and enhance productivity. Practical approaches such as on-the-job training and workshops enable workers to gain hands-on experience, leading to better quality output and reduced errors. Modern training methods, including digital learning and simulations, further support skill development by making learning more flexible and efficient. On the other hand, ineffective or poorly designed training methods can result in low employee performance, increased wastage, and safety issues. Therefore, selecting appropriate training methods is essential for improving efficiency, maintaining quality standards, and ensuring overall growth of the organization.

VII. DATA ANALYSIS AND INTERPRETATION OF TRAINING EFFECTIVENESS IN INTERIOR MANUFACTURING INDUSTRY

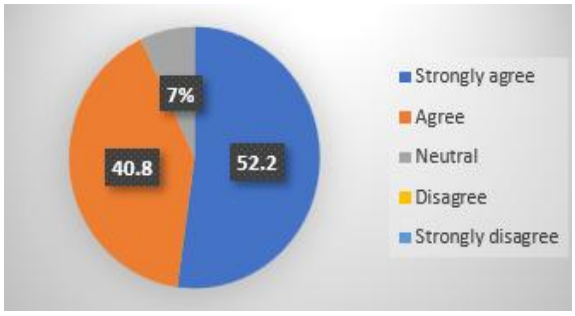
The data collected from employees provides deep insight into how the training system functions within manufacturing Industry and how it impacts production performance, employee skills, safety awareness, and overall organizational efficiency.
Improvement in Machine and Tool Handling Skills



Analysis: A large proportion of employees reported that training significantly improves their skills in handling machines and tools. Around 60.6% strongly agreed and 35.2% agreed with this statement, while only 4.2% remained neutral. There were no negative responses recorded. This clearly demonstrates that most employees' experience skill enhancement after attending training programs.

Interpretation: Production work mainly depends on technical efficiency and machine operation. The overwhelmingly positive response indicates that the training provided is practical and directly related to job responsibilities. Improved machine-handling skills reduce breakdowns, increase safety, and enhance productivity. This shows that the training content is effectively aligned with production requirements.

Reduction of Errors During Production

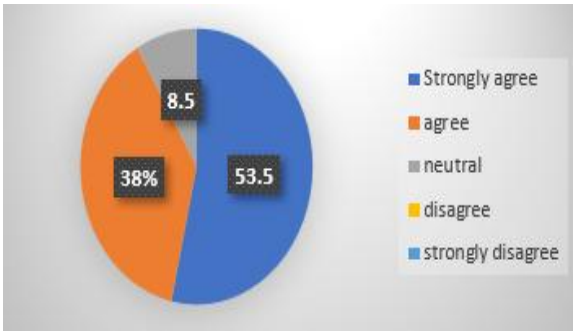


Analysis: Around 52.2% strongly agreed and 40.8% agreed that training helps reduce errors in production activities. 7% respondent disagreed.

Interpretation:

Fewer errors lead to cost savings and better productivity. The strong agreement suggests that trained employees work more carefully and confidently, minimizing mistakes and improving output quality.

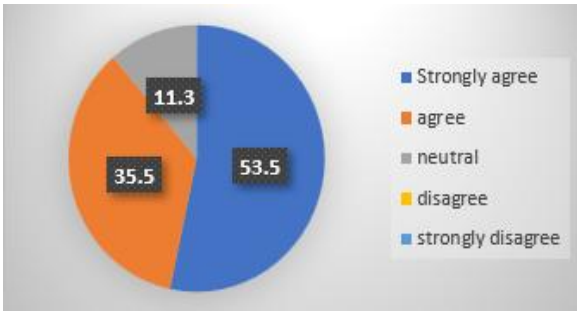
Explanation of Safety Practices During Training



Analysis: Safety practices were viewed positively by employees, with 53.5% strongly agreeing and 38% agreeing that safety procedures are clearly explained during training. Only 8.5% remained neutral. The absence of disagreement shows strong approval of safety instruction.

Interpretation: Safety is a crucial element in any production environment. The high level of agreement indicates that the company prioritizes employee well-being and ensures that safety guidelines are thoroughly explained. Clear safety instruction reduces workplace accidents and builds employee confidence while performing risky tasks.

Inclusion of Practical Demonstrations

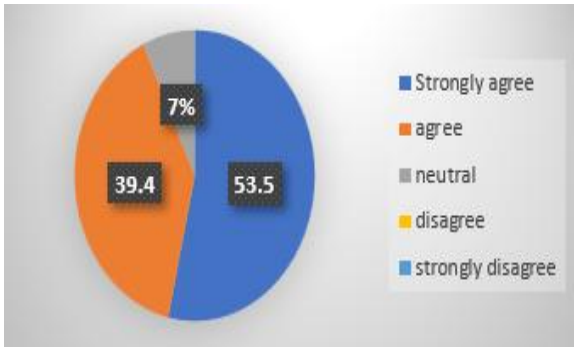


Analysis: About 53.5% of respondents strongly agreed and 35.2% agreed that practical demonstrations are included in training programs. Around 11.3% remained neutral. This shows that the majority of employees experience hands-on learning during training sessions.

Interpretation: Practical demonstrations make learning more effective compared to theoretical explanations

alone. The strong agreement suggests that employees benefit from real-time demonstrations of machines and processes. This approach enhances understanding, improves retention, and builds confidence in performing production activities independently.

Updating of Training Content with New Technologies

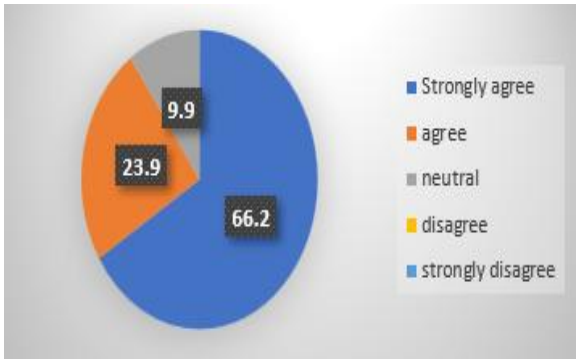


Analysis: A majority of employees (53.5%) strongly agreed and 39.4% agreed that training content is updated according to new production technologies. Only 7% remained neutral.

Interpretation:

Technology in production changes rapidly, and updating training content is essential. The positive response indicates that the company keeps its employees informed about technological advancements. This helps employees adapt easily to new equipment and modern production methods.

Problem-Solving Ability in Production

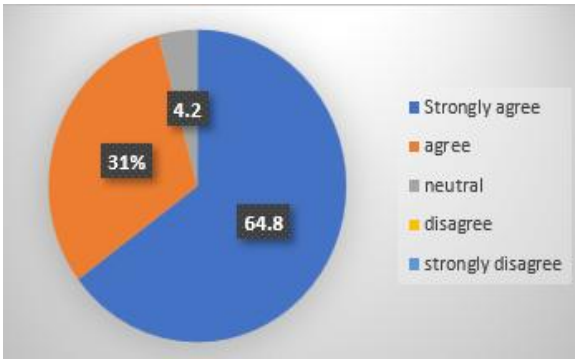


Analysis: Around 66.2% strongly agreed and 23.9% agreed that training helps them solve production-related problems effectively. Only 9.9% were neutral.

Interpretation:

This finding suggests that training enhances analytical and problem-solving skills. Employees feel more confident in handling production challenges after receiving training. This reduces dependency on supervisors and improves operational efficiency.

Reduction of Production Delays

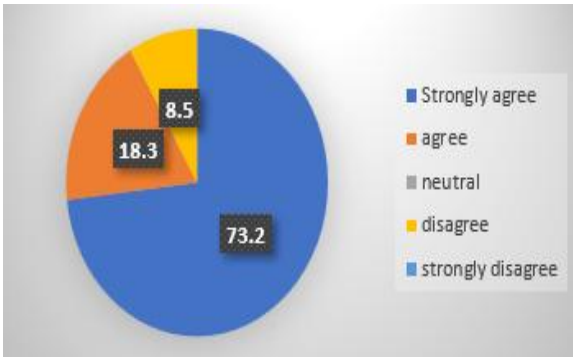


Analysis: Nearly 64.8% strongly agreed and 31% agreed that training reduces delays in production activities. Only 4.2% remained neutral.

Interpretation:

Production delays often occur due to lack of knowledge or technical errors. The strong agreement indicates that trained employees perform tasks more efficiently, leading to smoother workflow and timely completion of targets.

Preparation to Use New Production Equipment



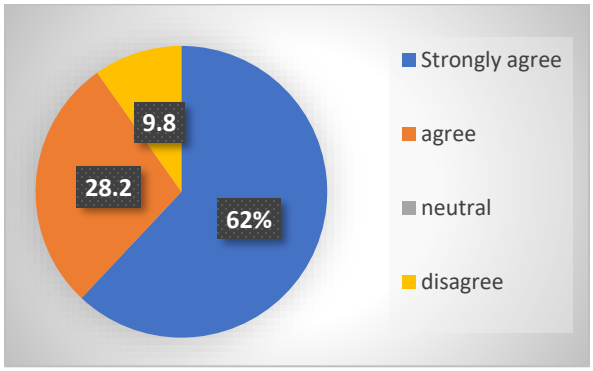
Analysis: A significant 73.2% strongly agreed and 18.3% agreed that training prepares them to use new production equipment. 8.5 % respondent disagreed.

Interpretation:

The extremely high percentage of strong agreement highlights the effectiveness of training in handling technological advancements. It shows that employees

are not resistant to change because they are properly guided and trained.

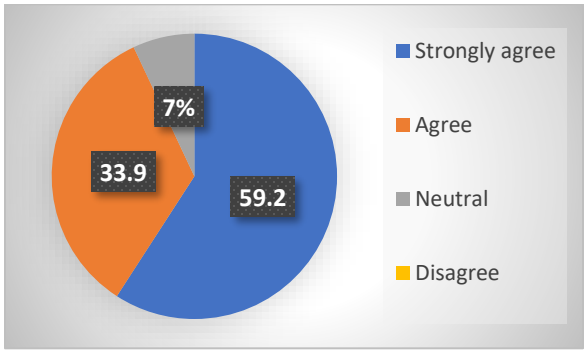
Enhancement of Quality Standards



Analysis: About 62% strongly agreed and 28.2% agreed that training enhances quality standards in production. Only 9.8 % respondent disagreed.

Interpretation:
Quality improvement is directly linked to employee competence. The positive response suggests that training contributes to maintaining higher production standards, reducing defects, and ensuring customer satisfaction.

Clear Understanding of Production Processes



Analysis: Nearly 59.2% strongly agreed and 33.8% agreed that training helps them understand production processes clearly. 7% respondents were neutral.

Interpretation:
Understanding the production process is essential for smooth workflow. The findings indicate that training provides conceptual clarity and improves awareness of each stage in the production cycle.

VIII. ANALYSIS OF EFFECTIVENESS OF TRAINING METHOD USING CHI- SQUARE TEST

Null hypothesis (H_0): There is no significance relationship between training and production performance.
Alternative hypothesis (H_1): There is a significant relationship between training and production performance.

	Strongly Agree	Agree	Neutral	Total
Strongly agree	22.0	17.0	5.00	44.00
Agree	10.0	14.0	0.00	24.00
Neutral	0.0	0.0	3.00	3.00
Total	32.0	31.0	8.00	71.00

χ^2 Tests			
	Value	df	p
χ^2	28.1	4	<.001
N	71		

Interpretation:
Since the calculated chi-square value (28.1) is greater than the table value (9.488) and the p-value is less than 0.001, the null hypothesis (H_0), which states that there is no significant relationship between training and production performance, is rejected. Therefore, the alternative hypothesis (H_1), which states that there is a significant relationship between training and production performance, is accepted.
This result indicates that training has a significant influence on production performance. It shows that employees who receive proper training tend to perform their tasks more efficiently, which improves the overall production performance of the organization.

Therefore, it can be concluded that training plays an important role in improving production performance. Effective training programs help employees enhance their skills and contribute to higher productivity in the organization.

IX. CHALLENGES FACED BY THE INTERIOR MANUFACTURING COMPANY

Interior manufacturing units handle everything from cutting and shaping to coating and finishing. On paper it looks like a smooth line from raw material to final product. In reality, daily operations are full of disruptions. Power cuts, missing materials, machine issues, and staff shortages turn routine work into constant problem-solving. These challenges don't just slow production — they affect people, money, and customer trust.

X. CHALLENGES

1. Power & Voltage Problems
Factories need stable electricity to run heavy machines and air compressors. Frequent power cuts force sudden stops, and unstable voltage damages equipment. Generators keep things moving but burn fuel and money, and still can't match full capacity.

2. Machinery & Air Compressor Breakdowns
Air compressors are central to cutting, cleaning, and coating. When they fail, multiple departments stall. Repairs are costly, spares aren't always available, and breakdowns increase with power issues and overuse.

3. Raw Material & Colour Delays
Aluminium and other key materials often arrive late due to market shortages or transport issues. Coating colours like white, brown, and teak finish are especially unpredictable. Without the right colour, finished goods can't ship, so semi-finished stock piles up.

4. Transportation & Logistics Gaps
Getting materials in and sending finished goods out, especially to cities like Bangalore, is unreliable. Vehicle shortages, traffic, and rising fuel costs cause delays. Damaged goods during transit add replacement costs and customer complaints.

5. Labour & Skill Shortages
Absenteeism and a lack of skilled workers disrupt daily targets. When a few people are missing, the rest get overloaded. Training new or temporary staff takes time, and rushed work lowers quality.

6. Planning & Scheduling Chaos
Power, material, machine, and labour uncertainties make production planning a daily gamble. Teams keep rescheduling, coordination breaks down, and stress rises across departments

7. Financial & Cost Pressure
Fuel for generators, urgent material purchases, repairs, and overtime wages keep pushing costs up. Delayed customer payments tighten cash flow, making it hard to invest in better machines or training.

8. Quality & Customer Issues
Sudden stops, tired workers, and missing colours lead to inconsistent finishing. Delays and defects hurt trust. In a competitive market, one bad experience can send a customer to another supplier.

XI. IMPACT OF CHALLENGES ON INTERIOR MANUFACTURING

Shortage of Skilled Labour: Interior manufacturing companies often struggle to find experienced workers, which leads to increased dependency on training and lowers initial productivity.
High Employee Turnover: Frequent employee exits create disruption in workflow and result in inconsistent production quality.
Resistance to New Technology: Employees may hesitate to adopt modern machines or methods, slowing down innovation and efficiency.
Limited Financial Resources: Companies may not invest enough in training programs or advanced tools due to budget constraints.
Lack of Training Infrastructure: Inadequate facilities and absence of professional trainers reduce the effectiveness of training.
Time Constraints: Strict production deadlines limit the time available for proper and complete training.
Communication Barriers: Language differences among workers can lead to misunderstandings during training sessions.

Educational Differences: Workers with varying educational backgrounds may find it difficult to grasp technical concepts equally.
Increased Errors and Wastage: Poor training leads to mistakes in production, causing material loss and rework.
Impact on Product Quality: All these challenges ultimately reduce product quality and customer satisfaction.

Challenges faced by interior manufacturing companies significantly affect their productivity and overall performance. Issues such as shortage of skilled labor, high employee turnover, limited resources, and resistance to change make it difficult to implement effective training and maintain quality standards. These challenges not only reduce employee efficiency but also lead to errors, wastage, and delays in production. Therefore, addressing these problems through better planning, proper training, and supportive management is essential for improving performance and achieving long-term growth.

XII. FINDINGS OF THE STUDY

- Training programs improved employees' machine and tool handling skills.
- Employees believed that training helped reduce production errors and improved work efficiency.
- Safety procedures were clearly explained during training sessions, increasing employee awareness.
- Practical demonstrations and hands-on learning methods made training more effective.
- Training helped employees adapt to new technologies and modern production equipment.
- Employees developed better problem-solving abilities after attending training programs.
- Proper training reduced production delays and improved workflow.
- Training contributed to maintaining better quality standards in production activities.
- Most employees gained a clear understanding of production processes through training.
- The study found a significant relationship between training and production performance through chi-square analysis.

XIII. SUGGESTIONS

- The company should provide regular training programs to improve employee skills and productivity.
- More practical and hands-on training methods should be used for better understanding.
- Training content should be updated regularly according to new technologies and industry requirements.
- The company should encourage multi-skill learning among employees to improve flexibility at work.
- Proper safety training should be conducted to reduce workplace accidents and improve awareness.
- The company should improve planning and coordination to reduce production delays and operational issues.

XIV. CONCLUSION

The study concludes that training plays a vital role in improving employee performance and production efficiency in the interior manufacturing industry. Effective training methods help employees develop technical skills, improve machine handling, reduce production errors, and maintain quality standards. The study also found that practical training and updated learning methods increase employee confidence and problem-solving ability.
However, the industry faces several challenges such as shortage of skilled labour, machine breakdowns, raw material delays, financial constraints, and resistance to new technologies. These issues affect productivity, workflow, and customer satisfaction.
The chi-square analysis confirmed that there is a significant relationship between training and production performance. Therefore, organizations should focus on continuous employee training, better planning, and modern training practices to improve operational efficiency and achieve long-term growth.

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