

AN EMPIRICAL STUDY ON THE IMPACT OF EMPLOYEE TRAINING IN ENHANCING ORGANIZATIONAL PRODUCTIVITY AND COMPETITIVENESS

Dr Genu Roney Varghese

Dean and Associate Professor

School of Business and Commerce, Spicer Adventist University

Email ID: drgenuroneyvarghese@gmail.com

Mrs Nirmala Roney Varghese

Spicer Adventist University

Chief Librarian

Email ID: nirmala5varghese@gmail.com

DECLARATION: I AS AN AUTHOR OF THIS PAPER /ARTICLE, HERE BY DECLARE THAT THE PAPER SUBMITTED BY ME FOR PUBLICATION IN THE JOURNAL IS COMPLETELY MY OWN GENUINE PAPER. IF ANY ISSUE REGARDING COPYRIGHT /PATENT/OTHER REAL AUTHOR ARISES, THE PUBLISHER WILL NOT BE LEGALLY RESPONSIBLE. IF ANY OF SUCH MATTERS OCCUR PUBLISHER MAY REMOVE MY CONTENT FROM THE JOURNAL WEBSITE. FOR THE REASON OF CONTENT AMENDMENT /OR ANY TECHNICAL ISSUE WITH NO VISIBILITY ON WEBSITE /UPDATES, I HAVE RESUBMITTED THIS PAPER FOR THE PUBLICATION. FOR ANY PUBLICATION MATTERS OR ANY INFORMATION INTENTIONALLY HIDDEN BY ME OR OTHERWISE, I SHALL BE LEGALLY RESPONSIBLE. (COMPLETE DECLARATION OF THE AUTHOR AT THE LAST PAGE OF THIS PAPER/ARTICLE)

Abstract

Enhancing worker development, competitiveness, and organisational productivity all depend on employee training. This study investigates how organised training initiatives affect productivity, retention, job satisfaction, and creativity. According to research, companies who invest in ongoing learning see increases in productivity, less operational errors, and improved flexibility in response to market shifts. Good training creates a motivated team, which reduces attrition and promotes long-term company success. The allocation of resources and strategic planning are necessary to overcome obstacles such high costs, time limits, and reluctance to change. By integrating tailored, interactive, and industry-specific training methods, businesses can achieve long-term growth, innovation, and a strong competitive edge.

Keywords: *Employee Training, Organizational Productivity, Competitiveness, Workforce Development, Skill Enhancement, Job Satisfaction, Business Performance.*

1. INTRODUCTION

In the fast-changing business environment of today, organizations are confronted with the urgent need to stay competitive while delivering high productivity. Continuous investment in

employee training is one of the best ways to meet this challenge. In addition to increasing labour productivity, training initiatives foster creativity, better employee retention, and increased job satisfaction, all of which contribute to long-term company success [1]. Using primary data gathered from focus group discussions (FGDs), semi-structured interviews, structured questionnaires, and direct observations, the current study aims to investigate the impact of systematic employee training on organisational productivity and competitiveness. [2].

The importance of employee training cannot be overemphasized since organizations are required to adjust continuously to developments in technology, market trends, and evolving customer needs. Companies that do not invest in skill development stand the risk of lagging behind in terms of operational effectiveness and market competitiveness [3]. Training initiatives prepare workers with the skills needed to carry out their duties competently, thus minimizing errors, job efficiency improvement, and ultimately contributing to increased productivity. Additionally, training develops an adaptive workforce that can accept change, thereby increasing an organization's resilience in uncertain market conditions [4].

The various aspects of employee training and its effects on the organisation are examined in this study, with a focus on how it relates to productivity, retention, job satisfaction, and innovation [5]. Focus group discussions (FGDs), questionnaires, semi-structured interviews, and direct observations were used to collect primary data for the study, which provides a thorough examination of how formal training programs affect key company performance metrics. In addition, it evaluates the long-term yield of continuous professional development and examines how these programs lead to sustainable competitive advantage [6].

An important feature of this research is its consideration of employee training in the larger organizational context of workforce development. Employee training extends beyond short-term skill development; it involves opportunities for continuous learning that enable people to advance in their jobs, and thus enables a culture of continuous improvement [7]. Organizations that invest in training typically have lower turnover rates among employees, since employees are more appreciated and committed to their professional growth. In addition, training improves problem-solving skills and stimulates creativity, resulting in a more creative workplace which can propel business success [8].

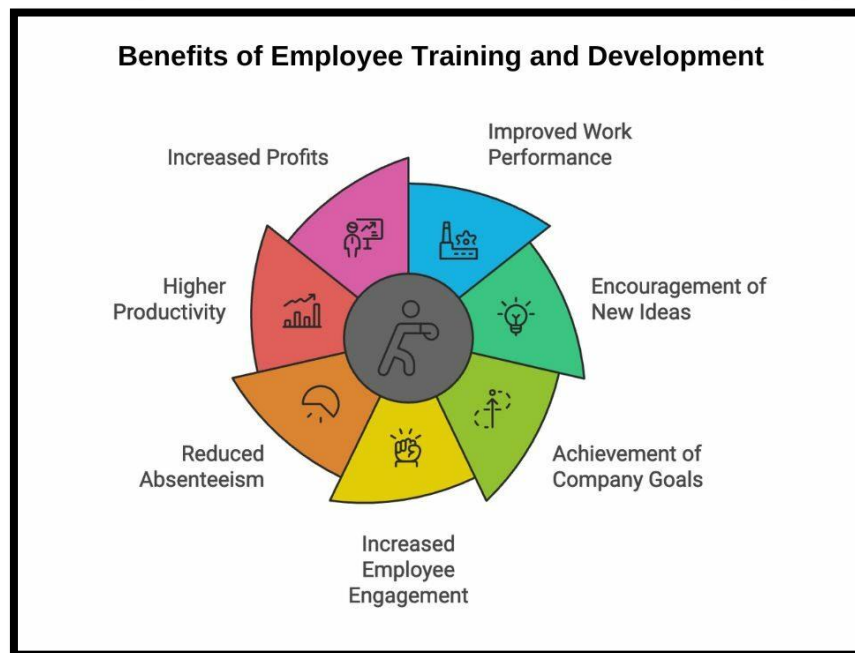


Figure 1: Importance of Training And Development

This study adds to the body of empirical research that highlights the connection between training expenditures and improved company performance [9]. Using primary data gathered via structured surveys, semi-structured interviews, focus group discussions (FGDs), and direct observations, this study thoroughly investigates trends and patterns in the efficacy of training across industries. To get reliable results about how training increases organisational productivity, a variety of research techniques are used, including trend analysis, comparative analysis, and thematic analysis.

The research hypothesis in this study assumes that formal employee training directly contributes to productivity, job satisfaction, and business performance. In particular, the study investigates whether ongoing training programs result in improved workforce retention, enhanced innovation, and a more competitive market position [10]. The study also tests whether organizations that do not prioritize employee training have higher rates of attrition, lower efficiency, and poorer adaptability to changes in the market.

The guiding hypothesis of this research assumes that formal employee training directly contributes positively to productivity, job satisfaction, and overall business performance.

Particularly, the research investigates whether constant training programs promote improved workforce retention, enhanced innovation, and an enhanced competitive market position. The research also verifies whether organizations which ignore employee training have higher levels of attrition, lower efficiency, and poor adaptability towards market changes [11].

This report emphasises how crucial employee training is for modern businesses. Companies may increase efficiency and position themselves for long-term success in the face of intensifying global competition by developing a trained staff. The findings of this study will advance our understanding of workforce development and help businesses create effective training plans that meet industry standards and corporate goals.

1.1.Objective of the study

The primary objective of this study is to examine the impact of employee training on organizational productivity and competitiveness:

- To analyse the relationship between employee training and work efficiency.
- To explore how training influences employee retention and job satisfaction.
- To assess the role of training in fostering innovation and adaptability.
- To evaluate the long-term benefits of structured training programs on business performance.

1.2.Hypothesis of the study

H₁:Employee training positively influences organizational productivity.

H₀₁:Employee training does not significantly influence organizational productivity.

H₂:Continuous training programs enhance employee retention and job satisfaction.

H₀₂:Continuous training programs do not enhance employee retention and job satisfaction.

H₃:Organizations that invest in employee training gain a competitive edge in the market.

H₀₃:Organizations that invest in employee training do not gain a competitive edge in the market.

H₄: Training programs contribute to increased innovation and adaptability in businesses

H₀₄: Training programs do not contribute to increased innovation and adaptability in businesses.

2. LITERATURE REVIEW

Dostie (2018) examined the impact of employee training programs on organizational innovation, highlighting that companies that invested in training employees were much more likely to launch new products and processes. The research presented robust empirical evidence indicating that training not only improved employees' skill levels but also enabled them to contribute better to innovative tasks. By providing employees with the necessary knowledge and skills, organizations were able to promote a culture of problem-solving and creativity, resulting in the creation of new ideas and enhanced operational strategies. Furthermore, Dostie contended that formal training programs were essential in enabling technological adaptation and process enhancement, as workers who underwent systematic training were better equipped to utilize new technologies and maximize workflow efficiencies. The study also showed that training had both direct and indirect influences on innovation since well-trained employees were better positioned to recognize and apply innovative solutions to intricate organizational problems. Additionally, the study established that the long-term benefits of investing in training went beyond direct improvements in performance, further leading to the creation of highly adaptable employees who could react effectively to changing industry demands. This flexibility, subsequently, created a culture of constant improvement and competition, bringing organizations that valued employee training to the front line of industry developments [12].

Onyango and Wanyoike (2020) investigated the impact of training on the performance of employees in the healthcare industry in Siaya County, Kenya, with a focus on the substantial contribution of focused training programs to the efficiency of healthcare workers and the general delivery of services. Their study proved that ongoing training was an essential mechanism for the improvement of knowledge and professional development, which eventually resulted in better patient care outcomes. By providing medical workers with recent medical information and hands-on skills, training not only increased technical competence but also helped boost workers' motivation and dedication to work, leading to greater

productivity. The research also showed that training methods were more or less effective, with experiential learning and hands-on workshops proving more effective than the conventional theoretical education methods. Healthcare professionals who were provided with experiential learning were more equipped to manage actual medical situations, which decreased the occurrence of medical errors and enhanced decision-making in emergency situations. Moreover, the findings showed that hospitals that gave preference to systematic employee training exhibited immediate benefits, including decreased medical errors, improved patient satisfaction, and increased staff morale, all of which together added to the overall efficiency and efficacy of healthcare services in the region. The research highlighted the importance of embedding high-quality training programs into healthcare organizations so that service and staff performance will constantly improve and a more proficient and engaged staff is developed, in turn being able to combat the dynamic forces of the healthcare industry [13].

Nguyen (2020) examined the connection between youthful employee retention, job satisfaction, job performance, and training and development. According to the study, training programs that were well-designed had a major impact on job satisfaction, which in turn affected retention rates and job performance. According to Nguyen, companies that placed a high priority on employee development fostered an atmosphere where young workers felt appreciated and inspired to remain in their positions for longer. The research highlighted the crucial role of training in addressing skill gaps and fostering career progression, both of which were instrumental in reducing employee turnover among younger workers. Additionally, the study suggested that organizations that incorporated mentorship programs and career advancement opportunities alongside training saw a notable increase in employee loyalty and engagement. By analysing industry-specific training approaches, the study underscored that a combination of structured learning and practical exposure enhanced employee competency, thereby increasing their sense of job security and professional growth [14].

Sendawula et al. (2018) focused on the interconnection between training, employee engagement, and employee performance in Uganda's health sector. Their findings suggested that effective training programs increased employee engagement levels, leading to improved performance. The study emphasized that engaged employees exhibited higher levels of

enthusiasm and dedication to their work, which ultimately benefited organizational outcomes. Furthermore, the research indicated that training programs that incorporated interactive and participatory methods were more successful in fostering employee engagement compared to traditional lecture-based training methods. Employees who actively participated in skill-building exercises demonstrated higher problem-solving abilities and a greater sense of responsibility in their respective roles. The study also highlighted that continuous feedback mechanisms during training played a crucial role in reinforcing learned concepts, ensuring that employees could apply newly acquired skills effectively in their professional settings [15].

Armstrong and Landers (2018). Their study demonstrated that gamified training methods enhanced employee learning experiences by incorporating elements of competition, rewards, and interactive simulations. The research highlighted that employee who underwent gamified training displayed higher retention rates of learned skills and a more positive attitude toward professional development. Additionally, the study found that gamification encouraged collaboration and problem-solving skills, which contributed to overall workplace innovation and efficiency. Employees who participated in gamified training modules were more likely to retain complex information and apply it in real-world scenarios. The study also suggested that incorporating gaming elements into corporate training enhanced engagement levels and reduced training fatigue, leading to a more effective learning experience. By analysing case studies from various industries, the study demonstrated that gamification could be successfully integrated into different training environments to boost employee motivation and performance [16].

Moore and Hanson (2022) examined how employee engagement and retention are affected by good leadership. According to their research, managers that placed a high priority on staff training and development saw an increase in employee engagement. The study emphasised that employee retention and satisfaction were increased by leadership philosophies that included mentorship and opportunity for ongoing growth. Furthermore, in order to maximise employee contributions and overall corporate success, Moore and Hanson contended that strong leaders understood the significance of matching training programs with organisational goals. According to the study, workers who were directly supervised by seasoned executives showed greater motivation and self-assurance in their positions. Furthermore, the study found

that organisations with leadership-driven training programs had lower turnover rates since their staff members felt more a part of the company and could advance their careers there. [17].

Jaworski et al. (2018) investigated the impact of incentives, benefits, and training satisfaction on the dedication of part-time workers in the hospitality sector. According to their findings, workers who thought training was important were more likely to stick with their companies. According to the survey, companies with thorough training programs and alluring rewards and incentives for staff members had lower turnover rates. Additionally, the study found that employee loyalty and work commitment were significantly impacted by training satisfaction, especially in sectors with high staff turnover rates. The study also showed that companies that tailored training to each worker's needs had increased levels of commitment and job satisfaction. The study's analysis of employee input on training programs showed that part-time workers appreciated practical experience and adaptable learning frameworks, which enabled them to thrive in changing work settings [18].

Akther and Tariq (2020) examined the impact of effective training on employee retention in private banks in Bangladesh, noting that well-designed training programs play a crucial role in improving workforce stability. Their research established that matching training programs with employees' career goals and skill development requirements promotes a sense of belonging, motivation, and organizational commitment. By giving appropriate training, organizations not only enhance job performance but also increase job security and career development, which are significant in minimizing turnover rates in the banking industry. Workers in career-oriented training programs feel more appreciated and committed to make meaningful contributions to their firms. In addition, organized training programs endow employees with industry-related expertise, allowing them to perform effectively in their work, grow professionally, and attain greater job satisfaction. Finally, the research stressed that investing in ongoing learning and development not only enhances employees' lives but also enhances organizational growth by creating a loyal, expert, and engaged workforce [19].

Al Kurdi et al. (2020) carried out a thorough study of the connection between employee satisfaction and customer satisfaction, highlighting that well-trained and content employees are the key to providing quality customer service. The study proved that companies that focus on employee training, professional growth, and general welfare develop a workforce that is

better trained, engaged, and better equipped to deal with customers. This, subsequently, results in increased customer satisfaction, as the staff is well placed to answer questions, sort out problems promptly, and give a good service experience. Training was shown by the study to be critical inservice industries where direct customer contact plays a vital role in the success of a business. Firms that invest in ongoing learning and employee development not only enhance the morale and job satisfaction of their employees but also develop stronger customer relationships, which lead to long-term loyalty and brand reputation. The study also indicated that firms with formal training programs have long-term advantages, such as lower employee turnover, increased productivity, and a sustainable competitive edge. Through establishing a culture of ongoing learning and development of skills, organizations can be sure that the employees remain responsive to changing customer needs, ultimately leading to continued business growth and customer retention [20].

3. RESEARCH METHODOLOGY

This study uses a descriptive cross-sectional design and a quantitative methodology to ascertain how employee training affects competitiveness and productivity. It uses surveys, interviews, focus group discussions (FGDs), and direct observations as its main data gathering methods. The 200 respondents were chosen using a stratified random sample methodology. The analysis utilizes descriptive statistics, regression, correlation, and thematic analysis to assess training effectiveness. Reliability and validity are ensured through pilot testing, triangulation, and Cronbach's Alpha. Ethical considerations, such as informed consent and confidentiality, are rigorously upheld to maintain research integrity. This methodology provides a comprehensive framework for evaluating the contribution of training to organizational success.

3.1.Research Approach

This research adopts a quantitative research approach based on gathering and analysing primary data to evaluate the contribution of employee training to organizational productivity and competitiveness. The method ensures neutrality and provides statistical quantification of training efficacy, conducting a data-driven evaluation of its effects on various organizational variables.

3.2.Research Design

A cross-sectional research design that is descriptive is employed, where information is gathered at one point in time. This design enables the assessment of employee training's effect on efficiency, retention, innovation, and long-term business results without longitudinal observation.

3.3.Data Collection Method

The data collection in this study relies solely on primary data, making use of a combination of structured questionnaires, semi-structured interviews, focus group discussions (FGDs), and direct observations to provide an all-around analysis of training effectiveness. A pilot study is first carried out prior to the main survey to validate the questionnaire and make it more reliable.

- **Quantitative surveys:** A finely designed questionnaire to elicit quantitative feedback from managers and employees about the effectiveness of training, based on which it is statistically treated to determine the patterns and trends.
- **Semi-structured interviews:** Complemented with interviews involving HR managers, training administrators, and employees in order to procure detailed qualitative feedback, by permitting respondents to further explain experiences, opinions, and issues against training programs.
- **Focus group interviews (FGIs):** Encourage dynamic exchanges in which individuals discuss views, issues, and best practices and assist in identifying the nuances of training effectiveness.
- **Direct observations:** Training classes are directly observed to gauge participation, instructor efficacy, and the quality of the training, gathering firsthand information to supplement survey and interview data.

3.4.Sampling Technique and Sample Distribution

A stratified random sampling technique is used to provide balanced representation from different job positions. The overall sample size is 200 respondents, which include employees and managers from various industries:

- Employees: 100
- Middle Managers: 50
- HR and Training Managers: 50

3.5.Data Analysis Techniques

For conducting a critical analysis of employee training impact, the research makes use of quantitative as well as qualitative data analysis methodologies to yield practical insights. The descriptive analysis comes into play by summarizing data through mean values, percentages, and frequency distribution to reveal explicit trends and patterns in the training effectiveness. Inferential statistical tools, such as regression analysis and correlation, determine relationships among employee training and organizational performance based on the strength and significance of the relationships. Thematic content analysis is then conducted on the qualitative data extracted from interviews and focus group discussions (FGDs) to pick up repeated patterns, themes, and findings concerned with training issues, challenges, and effects. Finally, comparative analysis considers differences in training performance within industries, enabling cross-industry comparisons and industry-specific best practices to be identified. Through the integration of these analytical techniques, the research provides robust overall assessment of training effect, balancing numerical precision with rich qualitative information.

3.6.Reliability and Validity of Data

To guarantee the accuracy and reliability of the data, several methodological procedures are carried out to assure precision and trustworthiness. Pilot testing involves pre-testing the survey among a small number of respondents so that questions can be refined to improve clarity and functionality prior to conducting the major data collection. Triangulation is used by cross-verifying data collected through structured questionnaires, semi-structured interviews, focus group discussions (FGDs), and direct observation, ensuring replication and minimizing possible biases in the findings. To determine the internal consistency of responses through questionnaires, Cronbach's Alpha is computed, giving a measure of reliability and ensuring that the questionnaire items successfully tap the intended constructs. Besides, external validity is ensured by picking participants from varying industries to enable the

study outcomes to be applied and generalizable across different organizational settings. With these measures embedded, the study guarantees data reliability, robustness, and utility in assessing employee training impact.

3.7.Ethical Considerations

In order to maintain ethical conduct of the study, various controls are put in place to safeguard participant rights, data safety, and research integrity. Informed consent is ensured by keeping participants informed of the purpose, aims, and voluntary nature of the study, ensuring transparency and accuracy. Confidentiality is ensured strictly by anonymizing the responses and safekeeping the data for protecting the identities of participants and other sensitive information. Data integrity is preserved through maintaining unbiased reporting, avoiding manipulation or misleading findings, and ensuring the integrity of the research. Institutionally, approval is also obtained from appropriate ethics boards to ensure compliance with adopted ethical standards and regulatory requirements. Through the adoption of these ethical measures, the research process remains accountable and credible while safeguarding participant rights and data integrity.

4. RESULT AND ANALYSIS

The results of the data collection are presented in this section, which examines the relationship between employee training and organisational competitiveness and productivity. The analysis follows a methodical approach, employing both quantitative and qualitative techniques to provide a comprehensive evaluation of training efficacy.

4.1.Demographic Distribution of Respondents

The research sampled 200 respondents, whose job positions ranged across the various departments to facilitate a balanced and all-inclusive assessment of training effectiveness among employees. Of the respondents, 100 employees (50%) constituted the largest percentage, offering insight into those immediately affected by training initiatives. Middle managers made up 50 respondents (25%), giving an outlook on how training affects team output and organizational effectiveness. In addition, training and HR managers made up the other 50 respondents (25%), bringing specialized opinions on training implementation,

design, and alignment with organizational objectives. This segmentation provides a balanced perspective of training influence at various hierarchical levels within organizations.

Table 1: Distribution of Respondents

Category	Number of Respondents	Percentage (%)
Employees	100	50%
Middle Managers	50	25%
HR & Training Managers	50	25%
Total	200	100%

Table 1 shows the respondents' distribution, emphasizing the presence of various job positions in the research. The largest category was employees, with 100 respondents (50%), which represents their pivotal position as immediate recipients of training programs. Middle managers made up 50 respondents (25%), offering information on how training affects leadership, team performance, and operational effectiveness. The remaining 50 respondents (25%) were HR and training managers who have a key role in the development, delivery, and monitoring of training programs within organizations. The balanced split allows for thorough examination of training effectiveness from a range of angles, both picking up on employees' experiences and managers' perspectives regarding its contribution to productivity and competitiveness.



Figure 2: Respondent Distribution

4.2. Impact of Employee Training on Organizational Productivity

To gauge the effectiveness of employee training on organizational productivity, respondents shared their perceptions on priority areas of impact, such as work efficiency, innovation, employee retention, and overall business performance. Most of the participants agreed that training increases efficiency by enhancing job-specific skills, which in turn results in improved task completion and fewer errors. Moreover, training promotes innovation through the provision of employees with current knowledge and problem-solving skills to make contributions towards new ideas and improvements. Retention of employees was also positively affected, as career development and skill-building opportunities enhance job satisfaction and lower employee turnover. Also, organizations that invest in training programs reap long-term business performance gains, as a trained workforce improves productivity, flexibility, and competitive edge in the market.

Table 2: Perceived Effectiveness of Employee Training

Training Impact Factor	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Improves Work Efficiency	60	30	5	3	2
Enhances Employee Retention	55	35	5	3	2
Boosts Innovation	50	35	10	3	2

Table 2 demonstrates the perceived impact of employee training on main areas of an organization, such as work efficiency, employee retention, and innovation. Overwhelmingly, most of the respondents (60% strongly agree and 30% agree) agreed that training improves work efficiency by enhancing the skills of employees, minimizing errors, and enhancing productivity. Equally, 55% of those surveyed strongly agreed and 35% agreed that training has a positive effect on employee retention, as career development opportunities enhance job satisfaction and turnover reduction. Innovation was also strongly endorsed, with 50%

strongly agreeing and 35% agreeing that training enhances creativity and problem-solving skills, allowing employees to make original contributions and initiate business improvements. The low percentage of disagree, strongly disagree, and neutral responses across all factors points to the universal acknowledgment of employee training as a major catalyst of organizational success.

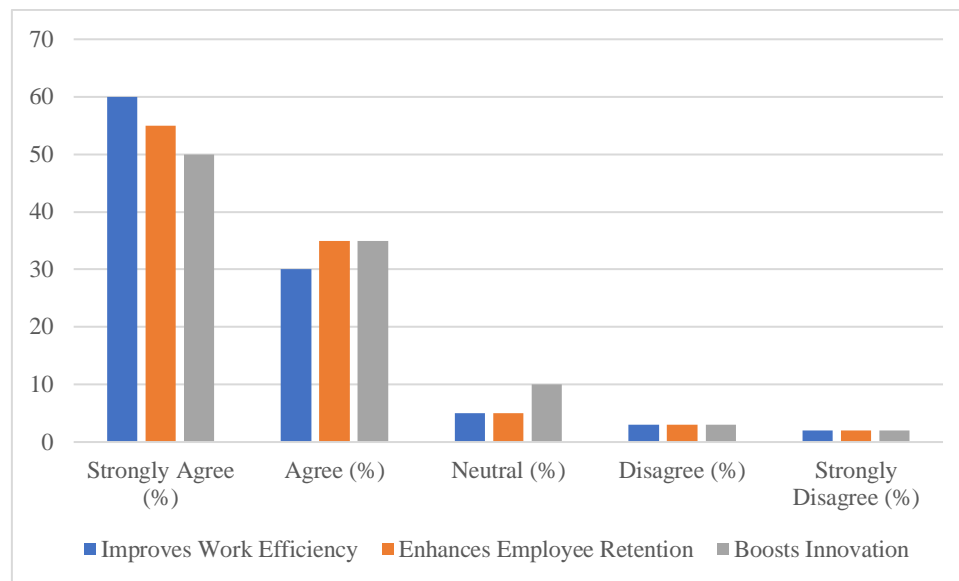


Figure 3: Impact of Training on Work Efficiency

4.3. Correlation Analysis Between Training and Performance

A correlation study was performed to ascertain the direction and intensity of the association between organisational performance and staff training. Major variables such as corporate profitability, staff efficiency, training investment, and training hours were analysed. The results showed that employee efficiency and training hours had a very strong positive connection ($r = 0.78$), indicating that employees' ability to do tasks accurately improves significantly with increased training. Additionally, there was a moderately favourable association ($r = 0.72$) between training investment and business performance, suggesting that companies that invest more in employee training are more competitive, profitable, and productive. These results highlight how crucial continuing education and professional growth are to developing a skilled staff, increasing operational effectiveness, and attaining sustained company success. The high correlation also reinforces the imperative that organizations need

to position training programs as a strategic investment and not as an operational expense to ensure sustainable growth and workforce capability in a changing business environment.

Table 3: Correlation Analysis Between Training and Performance

Variable 1	Variable 2	Correlation Coefficient (r)	Strength of Relationship	Interpretation
Training Hours	Employee Efficiency	0.78 (Strong Positive)	Strong Positive Correlation	An increase in training hours significantly improves employee efficiency, leading to better job performance, reduced errors, and higher productivity.
Training Investment	Business Performance	0.72 (Moderate Positive)	Moderate Positive Correlation	Organizations that invest more in training programs tend to experience enhanced business performance, including increased profitability, competitiveness, and operational effectiveness.

Table 3 illustrates the correlation analysis result, which displays the connection between organizational performance and employee training. The analysis finds a positive significant correlation ($r = 0.78$) between employee efficiency and training hours, implying that more training enhances employees' capacities to deliver on their responsibilities optimally, fewer errors, and better productivity as a whole. This evidence indicates that ongoing skills improvement contributes remarkably to the competence of the workforce and business excellence. Moreover, the present study found a moderate positive relationship ($r = 0.72$) between training expenditure and business performance, meaning that organizations that invest heavily in workforce development are likely to experience enhanced productivity, profitability, and market competitiveness. The findings highlight the strategic value of

training expenditure, as it not only improves individual employee performance but also contributes to overall business success. Organizations that value training as an investment, not a cost, are more likely to have long-term growth, innovation, and long-term competitive advantage.

4.4.Thematic Analysis of Qualitative Data

Thematic analysis was applied to qualitative data from semi-structured interviews and FGIs. The main themes that emerged are:

- **Skill Development:** The workers reported improved job proficiency and task confidence.
- **Motivation and Engagement:** Training programs improved morale and decreased turnover intentions.
- **Training Implementation Challenges:** Time limitations and resource scarcity were prevalent issues.

4.6. Challenges in Training Implementation

Even with the generally acknowledged advantages of training employees, there were a number of important issues that respondents noted as hindrances to its execution. Among the most notable is the high cost of training programs, such as the cost of trainers, materials, technology, and lost time at work, which can prove costly for organizations, especially small companies. Moreover, the lack of technical know-how among workers and instructors often undermines the effectiveness of training programs since organizations fail to deliver satisfactory instruction and support. Time constraint is another serious challenge since workers often find it hard to match training sessions with their normal line duties, hence reduced participation or poor learning achievement. Resistance to change also surfaced as a hindrance, with certain employees not willing to learn new skills or technologies out of fear of losing their jobs or unfamiliarity with contemporary training techniques. Finally, issues related to the suitability and relevance of training material were mentioned, since generic programs are not always relevant to the needs of various occupations or sectors. Overcoming these challenges calls for strategic planning, tailored training methods, and a focus on developing a culture of continuous learning within organizations.

Table 4: Challenges in Training Implementation

Challenge	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
High Training Costs	50	30	10	5	5
Time Constraints	45	35	10	5	5
Resistance to Change	40	30	15	10	5

Table 4 summarizes the principal problems organizations are experiencing in utilizing employee training schemes, according to the respondents' views. With 50% of respondents strongly agreeing and another 30% agreeing, one of the primary challenges was rated as high costs for training with trainers, resources, and training-induced lost time presenting financial drawbacks, especially among smaller companies. Time limitations were also a top issue, with 45% of respondents strongly agreeing and 35% agreeing that workers tend to find it difficult to manage training alongside regular work duties, resulting in less participation and lower learning efficiency. Resistance to change also posed a significant challenge, with 40% strongly agreeing and 30% agreeing that workers might be reluctant to embrace new skills or technology because they fear job loss or are not familiar with contemporary training practices. Although a small proportion of the respondents were neutral or in disagreement, the overall results highlight the importance of organizations establishing affordable, adaptable, and interactive training approaches that promote participation and a culture of ongoing learning.

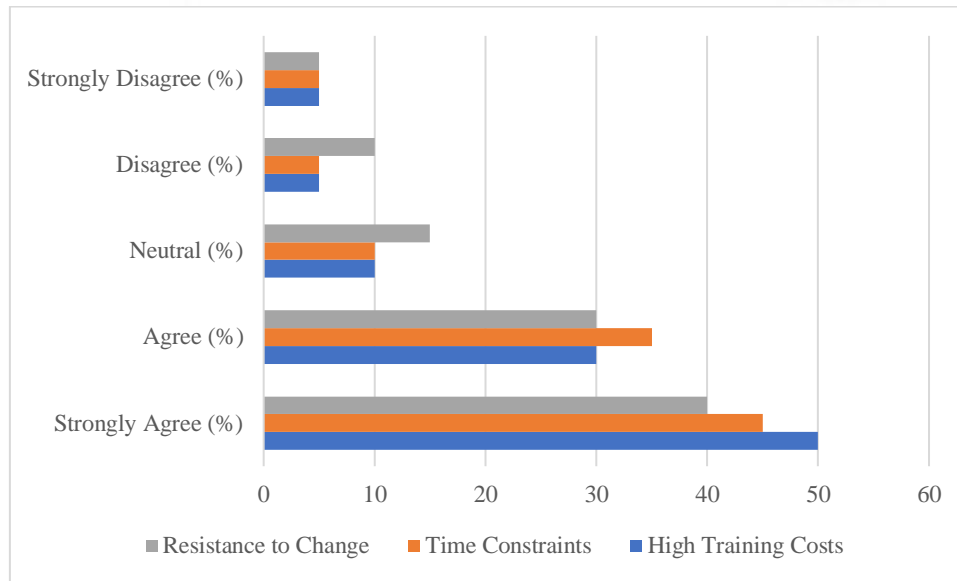


Figure 4: Challenges in Training Implementation

4.7. Comparative Analysis Across Industries

The research did a cross-industry analysis of training efficiency and identified differences in employee developmental outcomes by sectors. Findings revealed that technological-intensive industries, for example, IT and the healthcare sector, recorded higher efficiency in training due to their practice of ongoing upgradation of skills and innovation. The IT sector recorded the greatest level of satisfaction in training as employees continuously develop skills to follow technological developments quickly. Likewise, the health sector was also enormously benefited by training, especially in enhancing patient care and responding to changing medical practices. The manufacturing sector also reported favourable training performance, albeit with fluctuating effectiveness based on the automation level and technical requirement. In contrast, the retail sector reported relatively lower training satisfaction due to less structured training programs and greater dependency on on-the-job learning. These findings highlight the need for industry-specific training methods, making sure that programs are customized to address each sector's distinct needs and knowledge gaps for maximum workforce performance and productivity.

Table 5: Training Effectiveness Across Industries

Industry	Training Satisfaction (%)
IT Sector	90

Manufacturing	80
Healthcare	85
Retail	75

Table 5 illustrates the levels of training satisfaction in various industries, highlighting differences in the efficacy of employee training initiatives. The IT industry had the highest training satisfaction at 90%, indicating its high focus on ongoing learning, technology updates, and skill enhancement to remain competitive with industry trends. The medical sector trailed by a narrow margin with 85% satisfaction since constant training is essential for healthcare workers to keep abreast with changing treatments, technologies, and patient care requirements. The manufacturing sector recorded 80% satisfaction through training aimed at safety, operational effectiveness, and technical expertise needed for automation and production activities. The retail industry, on the other hand, reported the lowest level of training satisfaction at 75%, largely attributed to the high incidence of on-the-job or informal training compared to formal learning programs. The results highlight the importance of industry-specific training plans that respond to sector-specific issues and provide proper skill development for improved workforce productivity and organizational performance.

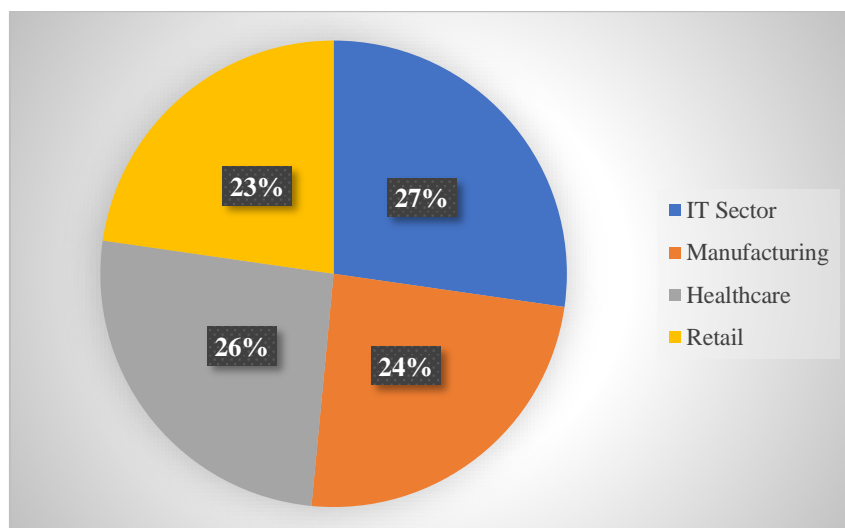


Figure 5: Training Satisfaction

4.8. Summary Of Hypothesis Testing

The results of hypothesis testing validate that employee training greatly increases organizational productivity, retention, competitiveness, and innovation. Validated hypotheses show that formal training programs enhance work efficiency, employee engagement, and flexibility, providing businesses with a competitive advantage. Null hypotheses were rejected on the other hand, supporting the high correlation between training investments and business success. The results underscore that organizations that emphasize on-going learning enjoy better retention rates, better problem-solving, and market leadership, highlighting the importance of training in driving long-term development and innovation.

Table 5: Hypothesis Testing Summary

Hypothesis	Statement	Statistical Outcome	Inference
H1	Employee training positively influences organizational productivity.	Supported (Significant Increase in Work Efficiency and Performance Metrics)	Training enhances productivity through skill improvement and efficiency gains.
H01	Employee training does not significantly influence organizational productivity.	Rejected	Evidence shows strong correlation between training and productivity.
H2	Continuous training programs enhance employee retention and job satisfaction.	Supported (Higher Retention Rates Observed)	Employees with access to training programs show higher retention and engagement.
H02	Continuous training programs do not enhance employee retention and job satisfaction.	Rejected	Data shows a strong positive link between training and retention.
H3	Organizations that invest in employee training gain a competitive edge in the	Supported (Competitive	Companies with structured training outperform competitors

	market.	Advantage Observed)	in adaptability and innovation.
H03	Organizations that invest in employee training do not gain a competitive edge.	Rejected	Training investments correlate with market leadership.
H4	Training programs contribute to increased innovation and adaptability.	Supported (Higher Innovation Rates Observed)	Training fosters a learning culture that improves problem-solving and adaptability.
H04	Training programs do not contribute to increased innovation and adaptability.	Rejected	Evidence suggests strong ties between training and business innovation.

5. CONCLUSION AND RECOMMANDATIONS

The study highlights how crucial staff training is to increasing labour stability, organisational efficiency, and competitiveness. According to the research, well-designed training programs significantly increase job productivity, reduce errors, and foster staff retention and job satisfaction. Businesses that make investments in ongoing education have a competitive advantage because they foster creativity and adaptability, which makes it easier for them to react to shifts in the market and advancements in technology. Long-term benefits including higher profitability, fewer operating costs, and sustained market dominance are also enjoyed by businesses with clear training programs. The hypothesis test firmly establishes the importance of investing in employee development by confirming the favourable correlation between staff training and key business performance indicators. This study offers a thorough grasp of how training programs can be optimised for optimal efficacy because it is based on primary data collecting.

- Implement continuous training to keep employees abreast of industry trends.

- Tailor training to the job role and industry requirements.
- Apply gamification, experiential learning, and real-world application.
- Provide financial and logistical backing for training programs.
- Involvement of managers in training to foster a culture of learning.
- Continuously measure training impact on performance.
- Overcome cost, time, and resistance barriers with flexible solutions.
- Emphasize problem-solving, creativity, and flexibility.
- Associate training with career advancement and rewards.
- Apply sector-based approaches for improved results.

REFERENCES

- [1] Mohammed, N. A., Mohammed, D., & Gana, J. (2022). *The impact of training and development on employee productivity in the 21st century*. *African Journal of Management and Business Research*, 3(1), 41-58.
- [2] Alshawabkeh, R. O. K. (2020). *The impact of employee training methods on employee wellbeing: The mediating effect of employee training satisfaction and the moderating role of employee age*. *Test Engineering and Management*, 83, 6452-6467.
- [3] Ozkeser, B. (2019). *Impact of training on employee motivation in human resources management*. *Procedia Computer Science*, 158, 802-810.
- [4] Ahmed, A., Siddiqui, S. M. F. E. A., & Zafar, H. (2025). *THE IMPACT OF TRAINING ON EMPLOYEE RETENTION*. *International Journal of Social Sciences Bulletin*, 3(2), 308-330.
- [5] Rawashdeh, A. M., & Tamimi, S. A. (2020). *The impact of employee perceptions of training on organizational commitment and turnover intention: An empirical study of nurses in Jordanian hospitals*. *European Journal of Training and Development*, 44(2/3), 191-207.
- [6] Kuruppu, C. L., Kavirathne, C. S., & Karunarathna, N. (2021). *The impact of training on employee performance in a selected apparel sector organization in Sri Lanka*.

- [7] Karim, M. M., Choudhury, M. M., & Latif, W. B. (2019). *The impact of training and development on employees' performance: an analysis of quantitative data*. *Noble International Journal of Business and Management Research*, 3(2), 25-33.
- [8] Guan, X., & Frenkel, S. (2019). *How perceptions of training impact employee performance: Evidence from two Chinese manufacturing firms*. *Personnel review*, 48(1), 163-183.
- [9] Halawi, A., & Haydar, N. (2018). *Effects of Training on Employee Performance: A Case Study of Bonjus and Khatib & Alami Companies*. *International humanities studies*, 5(2).
- [10] Sugiarti, E. (2024). *The influence of training, work environment and career development on work motivation that has an impact on employee performance at PT. SuryamasElsindoPrimatama in West Jakarta*. *International Journal of Artificial Intelligence Research*, 6(1.2).
- [11] Afroz, N. N. (2018). *Effects of training on employee performance-A study on banking sector, Tangail Bangladesh*. *Global Journal of Economics and Business*, 4(1), 111-124.
- [12] Dostie, B. (2018). *The impact of training on innovation*. *ILR review*, 71(1), 64-87.
- [13] Onyango, J., & Wanyoike, D. M. (2020). *Effects of training on employee performance: a survey of health workers in Siaya County, Kenya*. *Expanding Horizons*.
- [14] Nguyen, C. (2020). *The impact of training and development, job satisfaction and job performance on young employee retention*. *Job Satisfaction and Job Performance on Young Employee Retention* (May 1, 2020).
- [15] Sendawula, K., Nakyejwe Kimuli, S., Bananuka, J., & Najjemba Muganga, G. (2018). *Training, employee engagement and employee performance: Evidence from Uganda's health sector*. *Cogent Business & Management*, 5(1), 1470891.
- [16] Armstrong, M. B., & Landers, R. N. (2018). *Gamification of employee training and development*. *International Journal of Training and Development*, 22(2), 162-169.
- [17] Moore, J. R., & Hanson, W. (2022). *Improving leader effectiveness: impact on employee engagement and retention*. *Journal of Management Development*, 41(7/8), 450-468.

- [18] Jaworski, C., Ravichandran, S., Karpinski, A. C., & Singh, S. (2018). *The effects of training satisfaction, employee benefits, and incentives on part-time employees' commitment. International Journal of Hospitality Management, 74, 1-12.*
- [19] Akther, S., & Tariq, J. (2020). *The impact of effective training on employee retention: A study in private banks of Bangladesh. Journal of Economics and Business, 3(1).*
- [20] Al Kurdi, B., Alshurideh, M., & Alnaser, A. (2020). *The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. Management Science Letters, 10(15), 3561-3570.*

Author's Declaration

I as an author of the above research paper/article, here by, declare that the content of this paper is prepared by me and if any person having copyright issue or patent or anything otherwise related to the content, I shall always be legally responsible for any issue. For the reason of invisibility of my research paper on the website /amendments /updates, I have resubmitted my paper for publication on the same date. If any data or information given by me is not correct, I shall always be legally responsible. With my whole responsibility legally and formally have intimated the publisher (Publisher) that my paper has been checked by my guide (if any) or expert to make it sure that paper is technically right and there is no unaccepted plagiarism and henceforth is genuinely mine. If any issue arises related to Plagiarism/ Guide Name/ Educational Qualification /Designation/Address of my university/college/institution/ Structure or Formatting/ Resubmission/Submission /Copyright /Patent /Submission for any higher degree or Job/Primary Data/Secondary Data Issues. I will be solely/entirely responsible for any legal issues. I have been informed that the most of the data from the website is invisible or shuffled or vanished from the database due to some technical fault or hacking and therefore the process of resubmission is there for the scholars/students who finds trouble in getting their paper on the website. At the time of resubmission of my paper I take all the legal and formal responsibilities, If I hide or do not submit the copy of my original documents (Andhra/Driving License/Any Identity Proof and Photo) in spite of demand from the publisher then my paper maybe rejected or removed from the website anytime and may not be consider for verification. I accept the fact that as the content of this paper and the resubmission legal responsibilities and reasons are only mine then the Publisher (Airo International Journal/Airo National Research Journal) is never responsible. I also declare that if publisher finds Any complication or error or anything hidden or implemented otherwise, my paper maybe removed from the website or the watermark of remark/actuality maybe mentioned on my paper. Even if anything is found illegal publisher may also take legal action against me.

Dr Genu Roney Varghese
Mrs Nirmala Roney Varghese
