

The Role of Professional Training in Developing Leadership Skills Among Information Technology Sector Employees

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As technology advances, the professional world is becoming increasingly competitive. Achieving career success and meeting professional goals now requires both new and seasoned employees to continuously develop their skills and expand their knowledge. This necessity highlights the importance for businesses in the IT sector to expose their employees to professional training programs that enhance leadership skills, ultimately benefiting the organization. The main aim of this study is to examine the impact of professional training on leadership skills development among IT sector employees, focusing on the challenges and benefits identified through a qualitative approach. Data was collected via a survey questionnaire, with responses from 200 participants in Malaysia and India. The findings reveal the impact of professional training for IT employees, particularly regarding the role of training activities in fostering leadership development. This study offers insights and guidance for employees on the advantages and obstacles of pursuing professional training, leading to enhanced leadership capabilities.

Keywords: Employee Development; Information Technology (IT) Sector; Leadership Development; Professional Training; Skill Enhancement

INTRODUCTION

In the rapidly evolving digital world of today, the Information Technology (IT) industry serves as a key driver of innovation and development. Effective leadership skills are essential in this fast-paced industry to overcome obstacles, foster growth, and propel organizational success. Leadership is defined as the ability of a leader to influence a group of people toward achieving organizational goals (Purnaman et al., 2022). An organization's ability to attract and retain quality employees significantly impacts its success or failure, as the lifeblood of any firm is its workforce. The success or failure of the company is directly tied to employee performance, with trained and developed employees serving as the cornerstone of organizational achievement. Recognizing the critical need to develop leadership abilities within its workforce, our suggested approach focuses on integrating formal education through participation in professional training programs. Training is known to have a significant impact on organizational efficiency, equipping individuals with the necessary skills, knowledge, and abilities to effectively carry out their roles.

Moreover, training and development initiatives strongly prioritize the overall personality development of participants. By utilizing this strategy, businesses can improve leadership skills, empower employees, and, as a result, experience sustainable growth. Professional training, particularly in the IT sector, is essential for enhancing knowledge and skills in a rapidly evolving environment. Continuous education is crucial for maintaining relevance and competitiveness in IT. Companies that invest in extensive training programs provide their staff with the tools they need to learn new technologies, adapt to changing trends, and succeed in their roles (Chethana & Noronha, 2023). These training programs also contribute to the development of leadership qualities, enabling employees to overcome challenges such as communication difficulties within teams. This process benefits the organization while giving employees valuable real-time leadership experience, fostering effective decision-making, problem-solving, and strategic thinking as they manage teams to accomplish organizational objectives.

Additionally, through targeted training programs, employees can develop and hone these leadership abilities, realizing their potential as successful leaders in the IT industry. Conversely, incompetent leadership may create obstacles and uncertainty, negatively affecting the organization. It is crucial to fully understand the role of leadership in managing IT transitions to ensure that the company can effectively navigate changes. Leadership responsibilities in overseeing IT transitions extend beyond technical aspects and have substantial implications for the organization's human capital (Manda & Abidin, 2023).

Professional training is, therefore, regarded as having a significant impact on organizational effectiveness, equipping individuals with the necessary knowledge, skills, and abilities to fulfill their assigned responsibilities. It has also been observed that increasing training investments has led to improved productivity. One could argue that training and development programs place a strong emphasis on the overall development of participants' personalities (Kuvaas, 2008).

In conclusion, professional training programs are a calculated and strategic approach to leadership development in the IT sector. Organizations can cultivate a pool of qualified leaders who improve team performance, boost confidence and morale, adapt to change, and foster innovation. Beyond enhancing organizational accountability, leaders who adhere to moral principles and provide clear visions and objectives may also inspire their teams to uphold universally recognized ethical standards. Charismatic and capable leadership is essential in motivating companies to reach their ultimate corporate goals. Therefore, prioritizing the continuous development of leaders is crucial. By investing in

the leadership development of their employees, organizations can ensure their own success while contributing to the growth and efficiency of the IT sector as a whole. Monitoring staff performance is essential for organizations to plan and organize their training strategies effectively (Islam et al., 2021).

The main objective of this study is to examine the impact of professional training on the development of leadership skills among employees in the IT sector, focusing specifically on the challenges and benefits experienced through a qualitative approach. The significance of this research lies in its potential to provide organizations with deeper insights into how professional training can foster essential leadership qualities, such as communication, decision-making, and strategic thinking, which are crucial in navigating the fast-paced and ever-evolving IT landscape. This study's novelty is evident in its exploration of the unique leadership challenges specific to the IT sector, such as keeping pace with technological advancements and managing multicultural teams, areas that have received limited attention in existing research. The contribution of this research is twofold: first, it offers practical recommendations for tailoring professional training programs to meet the specific leadership development needs of IT employees; second, it provides a framework for organizations to build a pipeline of effective leaders, enhancing both individual employee performance and overall organizational success. This study also contributes to the growing body of knowledge on leadership development in the context of rapid digital transformation.

LITERATURE REVIEW

Manda and Abidin (2023) propose that leadership plays a role in managing IT changes in the rapidly digital era. Effective leaders must possess an understanding of technology, develop a digital transformation strategy, and guide their organizations through these changes. Such leadership is important for enhancing productivity, fostering innovation, and maintaining organizational competitiveness. In addition, organizations face the dual challenges of staying competitive and managing continuous technological changes. Employees must develop new skills, adapt to changing roles, and understand the psychological impact of change to grow and evolve with technological advancements. In a case study on AirAsia, Fickry et al. (2020) highlight how leadership contributes to organizational success by navigating technological changes and fostering an innovative environment. This aligns with the findings of Hu and Kee (2023), who emphasize the importance of transformational leadership for effective corporate governance, particularly in public-sector enterprises. Koziol-Nadolna (2020) highlights the necessity of leadership in stimulating and encouraging staff innovation. Innovation is driven by various factors, including technological progress, changes in consumer behavior, increased competition, limited resources, short product life cycles, and evolving business environments. Leaders play a pivotal role in shaping innovative attitudes within companies. They should be open to new ideas, support employees' initiatives, and foster a favorable working atmosphere based on teamwork, loyalty, and trust. Leaders should also act as facilitators of employee creativity and promoters of rewarding innovative behaviors to stimulate innovation effectively. Qian and Kee (2023) further explore the path to enhancing employee creativity, demonstrating that individual and team learning orientation, coupled with transformational leadership and creative self-efficacy, significantly influence innovative behaviors.

Ooha and Venugopal (2020) assert that employee training provides ample opportunities for expanding knowledge and skill sets. This, in turn, allows organizations to reap numerous benefits proportional to each worker's productivity. Employees who undergo training are better equipped to offer innovative ideas that can be highly beneficial to the company. Kee et al. (2020) provide empirical evidence from Malaysia, showing that transformational leadership and team innovation significantly impact team performance,

emphasizing the importance of effective leadership and continuous learning. [Herman et al. \(2019\)](#) address the need for the U.S. Air Force to cultivate 21st-century skills among its personnel to navigate today's complex technology and threat environments. These skills include critical thinking, communication, collaboration, creativity, and adaptability, all essential for managing complex challenges and leveraging technological advancements. Enhancing these skills is critical for increasing airman agility and ensuring the workforce is prepared to be effective in unfamiliar and unpredictable contexts. [Yang et al. \(2021\)](#) add to this by demonstrating how servant leadership among CEOs influences middle managers' voice behaviors, which in turn affects employees' engagement and innovative contributions. [Singh and Mohanty \(2012\)](#) conducted a comparative study analyzing the relationship between individual Human Resources (HR) practices, such as training, and employee productivity. They find that while the impact of training on productivity exists across different industries, it varies in magnitude. The cyclical relationship between training, employee productivity, and revenue must be actively managed by investing in training. The knowledge and skills of an organization's employees are increasingly crucial to its performance, competitiveness, and advancement. [Soleymani et al. \(2021\)](#) identify factors affecting the effectiveness of staff training quality and highlight the importance of high-quality training programs in developing employees' skills and enhancing their performance. These studies collectively highlight the importance of professional training and leadership development in enhancing employee skills, fostering innovation, and ensuring organizational success.

Hypotheses Development

Relationship Between Enhanced Leadership Abilities and Professional Training

The correlation established between professional training and enhanced leadership abilities is particularly noteworthy. Organizations that invest in comprehensive training initiatives witness significant improvements in team performance, morale, and innovation. By nurturing a culture of continuous learning, these organizations not only enhance individual employee competencies but also cultivate a workforce that is agile, motivated, and capable of spearheading transformative initiatives. The art of leadership encompasses a wide range of capabilities, characteristics, and actions that enable individuals to effectively guide, motivate, and influence others toward common goals. Early studies on leadership primarily focused on identifying the specific qualities associated with effective leaders. Traits like intelligence, extraversion, conscientiousness, and emotional stability have been consistently associated with effective leadership ([Judge et al., 2009](#)). Moreover, certain behavioral styles, such as transformational leadership, have been associated with positive outcomes such as employee satisfaction, motivation, and performance ([Bass & Avolio, 1994](#)). Many organizations choose to make strategic investments in leadership development initiatives to cultivate a pipeline of talented future leaders and elevate the skills and abilities of their current leadership team. These programs encompass a variety of enriching opportunities, such as structured training sessions, personalized coaching and mentoring, and hands-on experiential learning experiences ([Avolio et al., 2009](#)). Studies show that effective leadership development programs can result in enhanced leadership abilities, self-awareness, and overall organizational success ([Day et al., 2014](#)).

H1: Enhanced leadership abilities are positively related to professional training.

Relationship Between Improved Team Performance and Professional Training

Teams can be perceived as fluid entities that adapt and grow in accordance with the external factors influencing them ([Mathieu et al., 2019](#)). In the realm of performance, the efficacy of teamwork stands out as a critical component, as it is widely acknowledged that enhanced team cohesion results in elevated performance outcomes, increased creativity, and long-term viability ([Bianco & Venezia, 2019](#)). A comprehensive training program encompasses modules focusing on the art of communication, fostering

teamwork, and mastering conflict resolution techniques. These invaluable skills will not only enhance collaboration but also cultivate a harmonious and unified team dynamic. Rosen and Dietz's (2017) study sheds light on the profound influence of collaboration on a wide range of crucial results, such as accuracy, efficiency, and member contentment, as well as the development of improved expertise, abilities, and mindsets within a team. Besides, professional training places a strong focus on cultivating critical thinking and problem-solving skills, empowering teams to tackle obstacles with greater efficiency and discover innovative solutions. Training and skill development are extremely important in the IT industry for both employee and organizational performance (Donthu & Subramanyam, 2022).

H2: Professional training interventions will positively impact team performance, leading to improved outcomes and productivity.

Relationship Between Increased Confidence and Morale and Professional Training

Morale refers to the intricate and intangible aspects of an individual's mindset, including their emotions, attitudes, and perceptions towards their organization and colleagues. High morale is characterized by traits like discipline, confidence, and enthusiasm for contributing to the organization (Shaban et al., 2017). These programs boost employees' confidence and morale, leading to significant development in their leadership abilities. Engaging in training opportunities can result in a boost in job satisfaction and morale for employees, empowering them to feel a greater sense of control over their work and fostering increased motivation (Zafar et al., 2016). The improvement in leadership abilities is facilitated by a rise in employees' self-assurance and motivation. This is because undergoing professional training helps employees gain the required expertise and know-how, ultimately boosting their confidence. Additionally, such training programs make employees feel appreciated and supported by their organization, leading to an increase in morale. This, in turn, results in a more positive and driven workforce, ultimately contributing to enhanced leadership skills within the organization.

H3: Increased confidence and morale are positively related to professional training.

Relationship Between Better Decision-Making and Professional Training

Decision-making involves choosing a course of action after carefully considering available information, preferences, goals, and constraints. It includes evaluating the potential outcomes and consequences of each option and selecting the most favorable one based on the situation. Effective leadership entails making strategic decisions, particularly when faced with intricate circumstances (Torlak et al., 2021). Decision-making can happen at different levels, from personal choices to strategic decisions in businesses, and usually requires cognitive processes like problem-solving and judgment. Successful decision-making necessitates clear objectives, rational analysis, risk assessment, and trade-offs between priorities. Relationships between decision-making and leadership skills make decision-making a critical role of a leader (Cray et al., 2007; Eberlin & Tatum, 2008).

H4: Better decision-making is positively related to professional training.

Relationship Between Adaptation to Change and Professional Training

Learning and development opportunities in organizations have a lasting effect on the ability to adapt to change, surpassing the impact of singular training sessions. Continuous training and development programs are crucial in fostering and solidifying flexible behaviors and attitudes, ultimately resulting in long-lasting enhancements in our ability to navigate and embrace change. Besides, organizational support systems such as strong leadership, and resources for training, improve the connection between

professional development and adaptability to change. According to [Rodriguez and Walters \(2019\)](#), investing in training and development for employees demonstrates a company's dedication to supporting both high-performing individuals and those who are eager to grow within the organization. This support creates an environment where employees can apply their training effectively in real-world situations, enhancing their ability to handle evolving circumstances. Having strong skills in technology helps employees to better grasp and utilize new tools and systems implemented during organizational changes, making it easier for them to adapt to technological advancements and digital transformations.

H5: Adaptation to change is positively related to professional training.

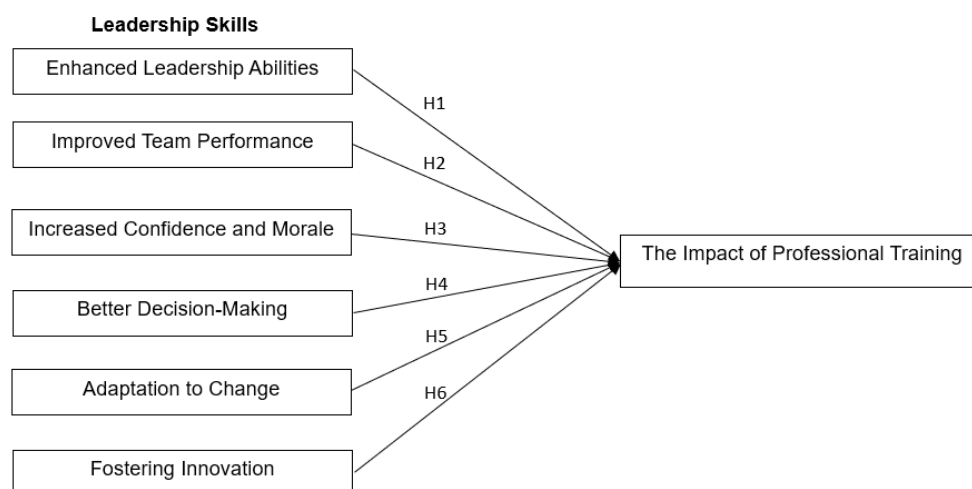
Relationship Between Fostering Innovation and Professional Training

Leadership is crucial in guiding and prioritizing innovation efforts, and leaders who actively promote and endorse innovation projects can encourage employees to use their training to drive innovation. Training programs help employees develop the knowledge, skills, and mindset needed to come up with and put into action new ideas, ultimately promoting an innovative culture in companies. Creativity and problem-solving skills are crucial for innovation, and training programs focused on these areas can help foster the development and execution of innovative ideas.

H6: Fostering innovation has a positive relationship with professional training.

Research Framework

Figure 1. The Research Model



[Figure 1](#) illustrates the conceptual framework that links various leadership skills to the impact of professional training. The model highlights six key dimensions of leadership development, all of which are hypothesized to be influenced by professional training programs.

RESEARCH METHOD

Sample and Procedure

The quantitative type of research is applied. This study used Google Forms to conduct an online survey to obtain data on the impact of professional training on leadership skills development among employees in the IT sector. This survey has involved a total of 200 respondents. This study reached out to our targeted respondents using social media platforms such as WhatsApp, Telegram, Instagram, and Facebook.

Measures

The Google Forms questionnaire used in this study is divided into three sections: demographic characteristics, understanding of professional training, and the impact of professional training on leadership skills development among employees in the IT sector.

The first section, demographic characteristics, aimed to identify the respondents' backgrounds using multiple-choice questions. These questions gathered information such as gender, age, ethnicity, nationality, occupation, and educational level. Additionally, respondents were asked if they are currently working in the IT field, to ensure the relevance of their input to the study.

The second section focused on professional training. This part of the questionnaire comprised six questions designed to assess the respondents' understanding of professional training. It included five multiple-choice questions and one question measured on a 5-point Likert scale, where 1 indicated "Not important at all" and 5 indicated "Very important." The objective was to capture how respondents perceive the role and importance of professional training in their careers.

The third and final section examined the impact of professional training on leadership skills development among employees in the IT sector. This was measured using a 5-point Likert scale, where respondents rated their agreement with various statements from 1 ("Strongly disagree") to 5 ("Strongly agree"). This section aimed to understand how professional training influences the development of leadership capabilities within the IT workforce.

RESULTS

Table 1. Summary of Respondent's Demography Example (N =200)

| Response | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Gender | | |
| Male | 95 | 47.5 |
| Female | 105 | 52.5 |
| Age | | |
| 18 – 25 years old | 98 | 49 |
| 26 – 35 years old | 65 | 32.5 |
| 36 – 45 years old | 28 | 14 |
| More than 45 years old | 9 | 4.5 |
| Ethnicity | | |
| Malay | 87 | 43.5 |
| Indian | 61 | 30.5 |
| Chinese | 50 | 25 |
| Siamese | 2 | 1 |
| Nationality | | |
| Malaysian | 170 | 85 |
| Indian | 30 | 15 |
| Occupation | | |
| Student | 85 | 42.5 |
| Employed | 103 | 51.5 |
| Non-employed | 3 | 1.5 |
| Retired | 9 | 4.5 |
| Education level | | |
| Secondary school | 3 | 1.5 |
| Diploma | 24 | 12 |

| | | |
|-----------------------------------|-----|------|
| Bachelor's degree | 151 | 75.5 |
| Master's degree | 20 | 10 |
| PhD | 2 | 1 |
| Information Technology (IT) Field | | |
| Yes | 184 | 92 |
| No | 16 | 8 |

The majority of the respondents were between 18 and 25 years old, with over half of them being female (52.5%). In terms of ethnicity, 43.5% were Malay, followed by 30.5% Indian, and 25% Chinese. Additionally, 1% of the respondents identified as Siamese. As seen in Table 1, this survey involved participants from two different countries—Malaysia and India. A majority of the respondents were Malaysian, which is expected since the survey was primarily conducted in Malaysia. However, the study aims to compare the results between these two countries to explore differences and similarities in the impact of professional training.

To further investigate the effect of professional training on leadership skills among IT sector employees, we asked respondents questions about their field of study or work. The results indicated that most of the participants were involved in the IT field, as shown in Table 1. Specifically, 92% of the respondents worked in the IT sector, providing a strong foundation for drawing conclusions relevant to this industry. This high percentage suggests that the sample is reliable for analyzing the relationship between professional training and leadership development within the IT sector. The data collected will help determine how effectively professional training impacts leadership abilities, team performance, decision-making, and other key leadership outcomes in the IT workforce.

Table 2. Summary of Respondents' Perspective on the Impact of Professional Training on Leadership Skills Among Employees of IT Sector (N=200)

| Response | Frequency | Percentage (%) |
|---|-----------|----------------|
| Have you participated in any professional training programs within the past year? | | |
| Yes | 133 | 66.5 |
| No | 67 | 33.5 |
| Do you think it is important for employees to participate in professional training? | | |
| Yes | 189 | 94.5 |
| No | 11 | 5.5 |
| What factors influence your decision to participate in a professional training program? | | |
| Relevance to career goals | 19 | 9.5 |
| Skill enhancement | 73 | 36.5 |
| Professional development opportunities | 51 | 25.5 |
| Reputation and credibility | 38 | 19 |
| Personal motivation | 19 | 9.5 |
| Do you think professional training will benefit the employees' career in the future? | | |
| Yes | 199 | 99.5 |
| No | 1 | 0.5 |
| How important do you perceive leadership skills to be in the context of a career in Information Technology? | | |
| Important | 194 | 97 |
| Natural | 6 | 3 |
| Not important | 0 | 0 |
| Which do you think are challenges unique to leadership in the Information Technology sector that should be addressed in professional training programs? | | |
| Problem-solving | 63 | 31.5 |

| | | |
|--|-----|------|
| Critical thinking | 100 | 50 |
| Keeping pace with technological innovation | 102 | 51 |
| Communication skill | 84 | 42 |
| Managing conflict | 52 | 26 |
| Impact of Professional Training: Enhanced Leadership Abilities | | |
| Agree | 194 | 97 |
| Natural | 6 | 3 |
| Disagree | 0 | 0 |
| Impact of Professional Training: Improved Team Performance | | |
| Agree | 192 | 96 |
| Natural | 8 | 4 |
| Disagree | 0 | 0 |
| Impact of Professional Training: Increased Confidence and Morale | | |
| Agree | 194 | 97 |
| Natural | 6 | 3 |
| Disagree | 0 | 0 |
| Impact of Professional Training: Better Decision Making | | |
| Agree | 193 | 96.5 |
| Natural | 7 | 3.5 |
| Disagree | 0 | 0 |
| Impact of Professional Training: Adaptation to Change | | |
| Agree | 189 | 94.5 |
| Natural | 10 | 5 |
| Disagree | 1 | 0.5 |
| Impact of Professional Training: Fostering Innovation | | |
| Agree | 191 | 95.5 |
| Natural | 9 | 4.5 |
| Disagree | 0 | 0 |

The analysis presented in [Table 2](#) directly supports the hypotheses formulation by correlating the respondents' feedback with the outlined hypotheses. A significant portion of the respondents (66.5%) actively engaged in professional training, indicating widespread recognition of its importance in fostering leadership abilities, which aligns with H1: "Enhanced leadership abilities are positively related to professional training." The data further shows that 97% of respondents believe professional training enhances leadership competencies, such as decision-making, team management, and communication skills, further supporting this hypothesis.

Regarding H2: "Professional training interventions will positively impact team performance, leading to improved outcomes and productivity," 96% of respondents confirmed that professional training improves team performance, establishing a direct link between leadership development and the ability to foster stronger, more cohesive teams.

Similarly, H3: "Increased confidence and morale are positively related to professional training" is corroborated by the 97% of respondents who reported that professional training boosts confidence and morale, equipping employees with the necessary skills to excel in their roles and overcome challenges.

The data also supports H4: "Better decision-making is positively related to professional training," with 96.5% of respondents acknowledging that professional training facilitates more effective decision-making processes. This reinforces the notion that professional development enhances critical thinking and decision-making skills, which are essential for leadership roles.

For H5: "Adaptation to change is positively related to professional training," 94.5% of respondents agreed that professional training enhances their agility and responsiveness to the dynamic nature of the IT landscape, underscoring the importance of continuous learning in enabling employees to adapt to technological and organizational shifts.

Finally, H6: "Fostering innovation has a positive relationship with professional training" is validated by 95.5% of respondents, who noted that professional training encourages innovation within IT teams by fostering creative thinking and supporting the adoption of innovative solutions. This demonstrates that professional training not only enhances leadership capabilities but also drives innovation, which is critical for maintaining competitiveness in the ever-changing IT industry.

In conclusion, the analysis strongly supports each of the formulated hypotheses, showing clear connections between professional training and its positive effects on leadership abilities, team performance, confidence, decision-making, adaptability, and innovation. These findings emphasize the pivotal role that professional training plays in shaping effective leadership and fostering organizational success in the IT sector.

This comprehensive view underscores the importance of ongoing professional development in equipping IT professionals with the skills necessary for effective leadership in a rapidly evolving industry. Employers should continue to invest in such programs to ensure their workforce remains competitive and capable in an ever-evolving technological landscape.

DISCUSSION

Based on the findings, professional training has a significant impact on the development of leadership skills among employees in the IT sector. The high participation rate in professional training programs aligns with industry trends that emphasize the necessity of continuous learning in the fast-paced and ever-evolving IT field. As noted by [Farid et al. \(2020\)](#), competitive and effective leadership practices are critical for organizations facing modern business challenges. In today's environment, where rapid technological advancements and complex market dynamics are the norm, fostering strong, competitive leadership is essential for ensuring organizational success. Companies, particularly in the IT sector, must therefore prioritize upskilling and reskilling initiatives to maintain a competitive edge in this rapidly changing landscape.

Moreover, the motivation for participating in professional training programs, particularly the focus on skill enhancement and professional development opportunities, echoes findings from studies on employee learning preferences. Many employees view professional training as a means to improve their competencies and advance their careers, which suggests that organizations should tailor their training programs to address specific skill development needs. This personalized approach to professional training could significantly increase employee engagement. When employees feel that their organization supports their learning and growth, they are more likely to be motivated and perform at a higher level. This aligns with [Teoh et al. \(2021\)](#), who found that employees who are satisfied with their organization's rewards and benefits system are more engaged and productive in their work. This correlation between professional development and employee satisfaction highlights the importance of investing in comprehensive training programs that align with both individual career aspirations and organizational goals.

Another key finding from this study is the positive impact of professional training on core leadership competencies, such as effective communication, decision-making, and

problem-solving. These skills are fundamental to the success of leaders in the IT sector, where teamwork and collaboration are critical to project success. The ability to communicate clearly and make informed decisions improves team performance, fosters a collaborative work environment, and ensures that teams are well-equipped to meet the challenges of the IT landscape. Sampaio and Sampaio (2024) support this notion by emphasizing that well-trained leaders are more effective at resolving conflicts, aligning team objectives with organizational goals, and driving overall performance.

In addition to enhancing leadership abilities, professional training has been shown to boost employees' confidence and morale. The findings suggest that training programs not only equip IT professionals with technical skills but also instill a sense of empowerment and readiness to tackle challenges. Confidence in one's abilities is closely linked to higher job satisfaction and overall productivity. When employees feel confident in their leadership capabilities, they are more likely to approach their roles with enthusiasm and take ownership of their work. This, in turn, leads to increased morale and a more positive work environment. Leaders who exude confidence are also more capable of inspiring and motivating their teams, creating a culture of trust and high performance.

Effective leaders are better equipped to navigate organizational change and guide their teams through periods of transition. Given the rapid pace of technological advancements in the IT sector, the ability to adapt to change is a critical skill for both leaders and their teams. Professional training programs that focus on change management and adaptability can help IT leaders stay agile, ensuring that they can respond quickly to new developments in technology and market conditions. This is particularly important in the IT industry, where new technologies and methodologies are frequently introduced, requiring continuous learning and adaptation. Leaders who can effectively manage change can also foster resilience within their teams, helping them to remain focused and productive during periods of uncertainty.

Furthermore, professional training promotes creativity and innovation, key drivers of success in the IT industry. The training equips employees with the tools to think critically and explore new ideas, which can lead to the development of innovative solutions. Encouraging a culture of innovation through training allows employees to push the boundaries of what is possible, enabling organizations to stay ahead in a competitive market. In a sector as dynamic as IT, where creativity and out-of-the-box thinking often lead to breakthroughs, investing in training that nurtures these skills is crucial for long-term success.

In conclusion, the analysis strongly validates the formulated hypotheses, demonstrating the significant role of professional training in enhancing leadership skills and fostering various positive outcomes within the IT sector. H1 is confirmed by the overwhelming agreement among respondents that professional training is positively related to enhanced leadership abilities, particularly in decision-making, communication, and strategic thinking. H2 is also supported by the data, as respondents reported improved team performance and productivity following professional training interventions.

H3 is substantiated by the findings showing that professional training boosts confidence and morale, which, in turn, enhances leadership effectiveness. The results also uphold H4, with respondents acknowledging that professional training positively impacts decision-making capabilities, reinforcing its importance in leadership development. Furthermore, H5 is validated by the evidence that professional training significantly improves employees' ability to adapt to change, a critical skill in the fast-evolving IT sector.

Finally, H6 is confirmed, as professional training is recognized for fostering innovation, encouraging creative thinking, and supporting the implementation of new solutions. Overall, the hypotheses are well-supported, highlighting the critical role of professional training in leadership development, team performance, confidence, adaptability, and innovation in the IT sector. These conclusions underscore the strategic importance of investing in professional training to cultivate future leaders and sustain organizational growth and competitiveness.

CONCLUSION

The study emphasizes how professional training significantly impacts leadership skills in the IT sector. The research reveals that IT employees are highly engaged in such programs, driven by a desire to enhance their skills and advance in their careers. The findings underscore the importance of professional training in developing essential leadership capabilities, including effective communication, decision-making, problem-solving, and strategic thinking. Respondents acknowledged the unique challenges in IT leadership, such as the need for critical thinking, keeping up with technological advancements, and effective communication. The study also demonstrates a positive correlation between professional training and leadership development, resulting in notable improvements in team performance, confidence, morale, and innovation. Tailored training programs addressing these specific challenges can help employees navigate the dynamic and competitive IT landscape more effectively.

One of the key findings of the research is the high degree of motivation and involvement among IT employees toward professional training programs. This drive stems from their strong desire to advance professionally in the ever-changing field of IT. As technology advances rapidly, it becomes increasingly clear that ongoing education is essential. In addition to providing IT professionals with the technical expertise required to handle complex systems, professional development cultivates the soft skills necessary for successful leadership in a multicultural, fast-paced workplace.

Furthermore, the study suggests that continuous professional development is crucial for staying relevant and competitive in the fast-paced IT sector. Organizations that invest in comprehensive training programs not only enhance individual employee performance but also drive organizational success and innovation. This investment results in a more motivated, skilled, and adaptable workforce capable of leading teams through technological and organizational changes. In summary, the research emphasizes that professional training is a strategic approach to cultivating leadership skills, which is essential for the sustainable growth and efficiency of the IT sector. Companies should prioritize such training to develop a strong pipeline of future leaders, ensuring long-term success and competitiveness in the ever-evolving digital world.

In conclusion, the study shows beyond any doubt that investing in professional training is a strategic decision that enhances leadership skills and fosters innovation and organizational excellence in the IT industry. Companies can create a strong pipeline of future leaders who are prepared to take on new challenges and guide their teams toward long-term success by promoting a culture of learning and growth. To successfully navigate the complexities of the IT landscape and achieve sustainable growth in the digital age, organizations must embrace professional training as a fundamental component of their strategy.

LIMITATIONS

The study has encountered a limitation regarding the diversity of the respondents' occupational backgrounds. Specifically, while the study focused on the IT sector, it included respondents from various other occupations such as students, employed

individuals across different fields, non-employed individuals, and retirees. This diverse respondent pool, including those outside of the IT sector, could potentially affect the accuracy and generalizability of the study's conclusions regarding IT-specific issues.

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DECLARATION OF CONFLICTING INTERESTS

The author(s) declare(s) that there is no conflict of interest.

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