

The Role of Transformational Leadership in enhancing Engagement and Motivation of Millennial Employees

Peran Kepemimpinan Transformasional dalam Meningkatkan Engagement dan Motivasi Karyawan Milenial

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ABSTRACT

Transformational leadership has become a key approach in increasing the engagement and motivation of millennial employees, who are an important segment of today's workforce. This research aims to explore how transformational leadership can be optimized with the help of digital technology to increase the involvement and motivation of millennial employees. The method used is a systematic literature review using the PRISMA approach, including articles from reputable international databases. The research results show that transformational leadership, supported by digital technology, can strengthen the engagement and motivation of millennial employees through increasing efficiency, communication and career development opportunities. The implications of these findings suggest that organizations adopt transformational leadership and utilize digital technology to create more productive and adaptive work environments.

Keywords: transformational leadership, digital technology, millennial employees, employee engagement, employee motivation

ABSTRAK

Kepemimpinan transformasional telah menjadi pendekatan kunci dalam meningkatkan keterlibatan dan motivasi karyawan milenial, yang merupakan segmen penting dalam angkatan kerja saat ini. Penelitian ini bertujuan untuk mengeksplorasi bagaimana kepemimpinan transformasional dapat dioptimalkan dengan bantuan teknologi digital untuk meningkatkan keterlibatan dan motivasi karyawan milenial. Metode yang digunakan adalah tinjauan literatur sistematis dengan pendekatan PRISMA, mencakup artikel-artikel dari database internasional bereputasi. Hasil penelitian menunjukkan bahwa kepemimpinan transformasional, ditunjang dengan teknologi digital, dapat memperkuat keterlibatan dan motivasi karyawan milenial melalui peningkatan efisiensi, komunikasi, dan kesempatan pengembangan karier. Implikasi dari temuan ini menyarankan agar organisasi mengadopsi kepemimpinan transformasional dan memanfaatkan teknologi digital untuk menciptakan lingkungan kerja yang lebih produktif dan adaptif.

Kata Kunci: kepemimpinan transformasional, teknologi digital, karyawan milenial, keterlibatan karyawan, motivasi karyawan

1. Introduction

Millennials, who constitute a significant segment of today's workforce, require a tailored approach to increase their engagement and motivation within organizations. Transformational leadership has emerged as an important factor in achieving this goal. Research shows that transformational leadership has a positive effect on work engagement, motivation, and ultimately the performance of millennial employees (Niati et al., 2022; Lusiana, 2021). This leadership style emphasizes inspiring and empowering employees, in line with the values and characteristics often associated with the millennial generation (Romi, 2023; Valldeneu et al., 2021). In addition, the practice of transformational and transactional

leadership styles by millennials shows their ability to be directive and empowering in various work situations (Arellano, 2022).

In addition, leadership roles, organizational culture, and job satisfaction have been highlighted as key factors influencing millennial employee engagement (Aziz, 2021; Wardini & Nawangsari, 2021). Effective leadership and positive organizational culture have been proven to have a significant impact on employee engagement and motivation among millennials (Aziz, 2021). Strategies such as mentoring, communication, and incentives have been identified as effective tools for engaging millennial employees and reducing barriers to engagement (Stephens, 2021). In addition, a study by Wardini & Nawangsari (2021) emphasizes the importance of corporate branding and organizational culture in increasing the involvement and motivation of millennial employees.

In conclusion, to increase millennial employee engagement and motivation, organizations must focus on implementing transformational leadership practices, building a positive organizational culture, and providing opportunities for career development and adaptability. By understanding millennials' unique characteristics and preferences, organizations can adapt their leadership styles and engagement strategies to effectively motivate and engage this generation in the workplace.

In the modern organizational era, transformational leadership has been identified as a highly effective approach to driving positive change and empowering employees. This leadership is characterized by the leader's ability to inspire, motivate, and facilitate individual development through a strong vision and commitment to innovation. Transformational leaders play an important role in building an adaptive and proactive organizational culture, which is very necessary in facing rapidly changing market dynamics.

The millennial generation, which now dominates the global workforce, has unique characteristics that influence the way they work and interact in the workplace. They are known as a generation that is highly digitally connected, seeks meaning in their work, and desires balance between work and personal life. Millennial employees also tend to value constructive feedback and opportunities to grow professionally. However, organizations often face challenges in maintaining their engagement and motivation, especially when traditional leadership methods are used.

In this context, digital technology plays an increasingly important role in supporting organizational activities. Digital tools, such as communication and collaboration platforms, e-learning, and performance management technologies, have become an integral part of the day-to-day operations of many organizations. This technology not only increases efficiency, but also provides new opportunities to support transformational leadership practices.

Despite this, many organizations still face significant issues regarding millennial employee engagement and motivation. High turnover rates and low employee commitment are some of the main challenges that are often faced. In an effort to overcome this problem, implementing effective transformational leadership in the digital era is becoming increasingly relevant. Additional challenges arise in the form of how to optimally utilize digital technology to support this leadership style, thereby significantly increasing the engagement and motivation of millennial employees.

Based on this phenomenon, this research asks a key question: "What is the role of digital technology in supporting transformational leadership to increase the engagement and motivation of millennial employees?" This question aims to fill a gap in the existing literature and provide new insights into the integration of digital technology with transformational leadership practices. This research not only seeks to understand the dynamics of interactions between leaders, technology, and millennial employees, but also to offer practical strategies that organizations can implement to increase employee engagement and motivation in this digital era.

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The lack of research integrating digital technology with transformational leadership in the context of millennial employees indicates a significant gap in the literature. In-depth empirical studies on this topic are still limited, especially those that explore how digital technology can be used effectively to support a transformational leadership style and its impact on millennial employee engagement and motivation. This research seeks to fill this gap by offering a new perspective that is relevant and needed in today's world of work.

The urgency of this research lies in the importance of finding effective strategies for leading millennial employees in the digital era. With increasing global competition and rapid changes in technology, organizations need to ensure that they can motivate and retain high-potential millennial employees. The direct impact of this research on employee productivity and retention in organizations cannot be ignored. It is hoped that the findings from this research can help organizations develop more adaptive and effective leadership approaches.

The novelty of this research is a new approach that combines digital technology with transformational leadership. The specific focus on millennial employees and their dynamics in the workplace provides a unique contribution that has not been widely explored in the literature. This research offers new insights for human resource management practitioners in

integrating digital technology with leadership practices, which can result in a more inclusive and productive work environment.

The contributions of this research include providing new insights for human resource management practitioners, as well as providing a basis for continued research on the integration of technology and leadership. The findings of this research can be used to develop practical strategies that support transformational leadership by utilizing digital technology, which can ultimately increase the engagement and motivation of millennial employees in the long term.

2. Methods

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method is a structured and transparent approach to conducting systematic literature reviews. PRISMA provides comprehensive guidance for the process of identifying, screening and selecting relevant articles, and ensures that all steps taken are well documented. The relevance of PRISMA in systematic literature reviews is very important because it helps researchers ensure that the review they conduct covers all existing literature and meets high quality standards.

Article Collection Process Article collection begins with a systematic search in reputable international databases such as Scopus, Web of Science, and others. This process involves several steps:

1. Identification: Perform an initial search using predetermined keywords.
2. Filtering: Filter articles by title and abstract to ensure relevance.
3. Qualifications: Review the full text of articles that pass screening to determine whether they meet the inclusion criteria.
4. Inclusion: Articles that meet all inclusion criteria will be included in the final analysis.

2.1. Keywords Used to Search for Articles

Article searches were conducted using relevant keywords to ensure broad coverage of the available literature. Keywords used include:

1. "transformational leadership"
2. "digital technology"
3. "millennial employees"
4. "employee engagement"
5. "employee motivation"

2.2. Number of Articles Obtained

In the initial search, a number of articles will be identified based on predetermined keywords. The total number of articles found in the initial search will be recorded, where the number of articles will go through a further selection process. After going through the screening and eligibility evaluation stages, only articles that meet the inclusion criteria will be included in the analysis.

2.3. Article Inclusion and Exclusion Techniques

2.3.1. Inclusion Criteria

1. Articles relevant to research topics on transformational leadership, digital technology, and millennial employees.
2. Articles published in reputable international journals and indexed in databases such as Scopus or Web of Science.
3. Articles that use valid and reliable research methods, and provide supporting empirical data.

2.3.2. Exclusion Criteria

1. Articles that are not relevant to the research topic, for example those that discuss leadership or technology in a different context.
2. Articles published in disreputable journals or not indexed in major databases.
3. Articles with weak methodology, invalidity, or not providing sufficient empirical data.

Article Selection Flow Using PRISMA The article selection process follows the PRISMA flow diagram showing the stages of selection from identification to final inclusion. This flow includes:

1. Identification: Identify articles through database searches.
2. Filtering: Remove duplicate articles and assess eligibility based on title and abstract.
3. Qualifications: Assess the full text of articles that pass screening for suitability.
4. Inclusion: Select articles that meet the criteria for inclusion in the literature review.

The PRISMA flowchart visualizes the number of articles identified, screened, assessed for eligibility, and ultimately included in the analysis, providing full transparency into the selection process undertaken.

3. Results and Discussions

3.1. Transformational leadership

Transformational leadership is a leadership style that focuses on inspiring and motivating followers to achieve common goals and improve organizational performance. This leadership approach emphasizes creating a work environment that supports personal and professional development among employees, which in turn increases motivation and commitment (Rony, 2023). Transformational leadership is characterized by its ability to face modern challenges and developments effectively (Garad, 2022). This leadership style prioritizes change and improvement within the organization, encouraging innovation, risk taking, and clear vision (Dong, 2023). The four key aspects of transformational leadership include ideal influence, inspirational motivation, intellectual stimulation, and individualized consideration, which are related to elements of organizational health such as integrity, collegial leadership, and academic emphasis (Armugam et al., 2021).

Furthermore, transformational leadership has been shown to have a positive impact on various aspects of organizational performance, including job engagement, team effectiveness, knowledge sharing, and employee performance (Khalid et al., 2021; Tran & Vu, 2021; Suhana et al., 2020; Suciono et al., 2022). This leadership plays an important role in increasing employee motivation, teamwork, and productivity, especially in challenging work environments (Khalid et al., 2021). In addition, transformational leadership is also associated with increased job satisfaction among employees, because leaders support and motivate their teams to meet human needs and achieve satisfaction (Bibi et al., 2022).

In the educational context, transformational leadership plays an important role in shaping school culture, staff performance, and student outcomes. This leadership involves characteristics such as articulating a vision, promoting group goals, providing individual support, intellectual stimulation, modeling appropriate behavior, and setting high performance expectations (Heenan, 2023). Principals with a transformational leadership style can help teachers transcend personal interests by initiating a vision, offering support, and stimulating intellectual growth (Duraku & Hoxha, 2021). Overall, transformational leadership is a powerful

leadership style that not only drives organizational success but also improves employee satisfaction, team effectiveness, and overall performance across various sectors.

3.2. The Effect of Transformational Leadership on Employees

Transformational leadership has a significant impact on employees, especially in terms of employee engagement and motivation. Research shows that transformational leaders are able to inspire a sense of purpose and significance in their followers, which leads to increased engagement, commitment, and job satisfaction among employees (Reyaz, 2024). This leadership style is characterized by elements such as inspirational motivation, idealism, individual consideration, charisma, and intellectual stimulation which play an important role in influencing subordinates to achieve organizational goals ("The Effect of Transformational Leadership on Employee Motivation, Compensation and Employee Performance of the Kupang District Water Supply Company", 2020). Furthermore, transformational leadership has been proven to improve employee performance through intrinsic work motivation, encouraging employees to better understand and enjoy their work, think innovatively, and produce brilliant ideas that contribute to organizational success (Udin, 2023).

Additionally, transformational leadership encourages innovative work behavior by promoting psychological empowerment and intrinsic motivation among employees. This leadership style has the strongest positive relationship with innovative work behavior when combined with high levels of intrinsic motivation and psychological empowerment, where engagement in the creative process mediates this relationship (Saeed et al., 2019). In addition, transformational leaders are known for their ability to inspire and motivate their teams through a shared vision, encouraging creativity and innovation, which has a positive impact on employee work motivation and job satisfaction (Nguyen, 2023).

Transformational leadership not only influences employee performance but also plays a role in improving organizational citizenship behavior (OCB) by inspiring and motivating subordinates to achieve better results (Sutanto, 2024). By providing clear direction, delegating tasks effectively, and involving employees in the decision-making process, transformational leaders create a conducive work environment that encourages employee performance and goal achievement (Nardo et al., 2019). This leadership style also encourages employee creativity and innovation by providing a compelling vision, considering staff needs and talents, and inspiring extraordinary efforts to achieve organizational goals (Harbi et al., 2019). In conclusion, transformational leadership has a profound effect on employees by increasing their engagement, motivation, performance, and creativity. By instilling a sense of purpose, encouraging innovation, and promoting intrinsic motivation, transformational leaders play a crucial role in driving organizational success through their ability to inspire and influence their teams effectively.

3.3. Digital Technology in Organizational Context

3.3.1. Definition and Types of Digital Technology

Digital technology has had a significant impact on human resource management by revolutionizing various HR processes and increasing organizational effectiveness. The integration of cutting-edge technologies such as Artificial Intelligence (AI), Big Data, Machine Learning (ML), Internet of Things (IoT), and 5G in HR processes is crucial for increasing productivity and encouraging sustainable organizational development (Makovoz, 2024). This transformation has changed the mode of organizational management in companies, emphasizing the need for strategic adaptation to the digital era to improve HR processes, employee engagement, talent management and overall organizational effectiveness (Prokopenko, 2023).

Digital technology has influenced all areas of personnel management, including employee selection and recruitment, adaptation, training and development, assessment, work

organization, motivation and remuneration (Balabanova & Balabanov, 2020). The use of digital technology has a significant impact on the entire employee life cycle in an organization, influencing processes such as hiring, onboarding, and termination (Холод et al., 2021). Furthermore, digital technology enables efficient employee management, allowing human resources departments to be more strategic than simply administrative (S., 2023).

In the context of digital transformation, human resource management is undergoing profound changes driven by digitalization, requiring the adoption of mobile applications, social networks, analytics, cloud technologies, VR, and new business development strategies for effective digital HR management (Kalavakolanu, 2023). Companies utilize advanced information technology to implement human resource management and control, facilitating efficient human resource allocation analysis and promoting more accurate human resource management in the digital economy era (Liao & Zhang, 2022). Overall, digitization of HR processes is essential for organizations to strategically adapt to the digital era, improve HR functions, and improve overall organizational performance. By adopting digital technologies and integrating them into HR processes, organizations can streamline operations, increase employee engagement, and drive sustainable growth in today's increasingly digitalized work world.

3.3.2. The Influence of Digital Technology on Organizational Dynamics

Digital technology significantly influences organizational dynamics, particularly in communication, collaboration, and employee learning and development. The integration of digital tools in the workplace has led to increased collaboration, competition, and the need for organizations to develop new capabilities (Saputra & Saputra, 2020). This impact is further highlighted by the effect of digital technology on employee wellbeing, especially in contexts like teleworking during events such as the COVID-19 pandemic (Xu, 2023). In the era of digital transformation, employees must acquire new competencies such as digital literacy, technology-based problem-solving, and collaboration skills to excel in the interconnected work environment (Christianity, 2024).

Furthermore, digital technologies have transformed the learning landscape by democratizing access to information, enabling collaboration, and streamlining processes, necessitating individuals to adapt and develop digital skills to enhance work performance (Sartika, 2023). Organizations that utilize digital platforms for autonomous learning observe benefits in skills development and performance enhancement (Mongadi et al., 2022). The digitalization of human resource management has not only influenced competencies and relational expectations but has also positively impacted employee wellbeing and organizational performance (Fedorova et al., 2019; Madzimure & Baloyi, 2022).

Leadership plays a crucial role in fostering digital learning organizations by establishing structures that adapt to digital change and shaping organizational culture to facilitate effective organizational learning (Hargitai, 2023). Additionally, the digital maturity of organizations is influenced by factors such as strategic capability, leadership, marketability, operational competence, employees, organizational learning, technology availability, and governance (Jidon, 2023). Establishing a digital culture within organizations is essential to support and sustain the use of digital technology, creating an environment conducive to digital transformation (Teguh et al., 2022). In conclusion, the influence of digital technology on organizational dynamics is profound, reshaping communication, collaboration, learning, and leadership practices. Organizations that embrace digital transformation can benefit from enhanced performance, improved employee experience, and increased innovation, ultimately driving organizational success in the digital age.

3.4. Millennial Employees at Work

3.4.1. Characteristics of Millennial Employees

Millennial employees are known for their self-confidence, creativity, enthusiasm for work, and technological literacy (Ingsih et al., 2022). These characteristics make them able to adapt to change and adept at maintaining a balance between work and personal life, which ultimately increases their productivity (Ingsih et al., 2022). Building trust and support between millennial employees and their colleagues can increase engagement, commitment and performance in the organization (Prasetya & Kartikawangi, 2021).

Providing trust, empowerment, and autonomy to millennial employees can strengthen their creative performance and increase positive emotional experiences at work (Zhang & Zhao, 2021). Job satisfaction is a crucial factor in improving the performance of millennial employees, because it is related to their professional competence and personal values (Indrayani, 2023). Organizational commitment is also important to foster a sense of attachment to the company among millennial employees (Jakayati, 2024).

Millennial employees tend to change jobs frequently, a phenomenon known as "Job Hopping" (Purwanto et al., 2021). However, organizations can attract and retain high-quality millennial employees by understanding and exploiting their generational characteristics (Wolverton et al., 2021). Although millennial employees bring beneficial attributes to the workplace, there is an increasing trend regarding turnover intentions among them, which requires focused efforts to retain these employees (Hudiono & Sari, 2022).

Research shows that empathetic leadership can increase job satisfaction and reduce turnover intentions among millennials, confirming the importance of leadership style in managing this generation effectively (Negoro & Wibowo, 2021). Organizations that wish to improve the performance of millennial employees must consider factors such as human resource management (HRM) practices, responsible leadership, and employee well-being ("Enhancing Millennial Employees' Job Performance in Indonesia Through HRM, Responsible Leadership and Employee Well-Being ", 2022). Individual characteristics and employee involvement are important elements that can have a positive impact on the performance of millennial employees in organizations (Ilhami et al., 2021). In conclusion, understanding the typical characteristics and preferences of millennial employees, as well as leveraging aspects such as job satisfaction, organizational commitment, and empathetic leadership, can make a significant contribution to optimizing their performance and engagement at work.

3.4.2. Challenges and Opportunities in Leading Millennial Employees

Leading millennial employees faces significant challenges and opportunities for organizations. With predictions that millennials will account for 75% of the global workforce by 2030 (Negoro & Wibowo, 2021), it is critical for leaders to adapt their leadership styles to suit the needs of this generation. Millennial employees have positive leadership traits such as good multitasking abilities, an open attitude towards diversity, and an innovative and flexible nature (Folarin, 2021). Understanding how millennials view leadership style is key for organizations to improve the work environment, increase job satisfaction, and reduce turnover (Brand & Walker, 2022).

Additionally, leveraging technology to increase engagement and motivation among millennial employees is critical. Research shows that practices such as social recognition and utilization of social media can have a significant impact on employee engagement (Nayak et al., 2020). In addition, the adoption of financial technology (FinTech) can positively influence employee engagement, which in turn improves an organization's competitive performance (Azam, 2023).

Furthermore, it is important to consider the impact of leadership behavior on millennial employees. Transformational leadership attributes have been proven to increase the capacity of millennial employees and increase their job satisfaction (Valldeneu et al., 2021).

Servant leadership and knowledge sharing have also been proven to trigger innovative work behavior among millennials in start-up companies (Dayanti & Yulianti, 2023). In addition, job characteristics and inclusive leadership styles play a role in increasing the creative performance of millennial employees (Zhang & Zhao, 2021).

In conclusion, leaders need to adapt their leadership styles to meet the needs of millennial employees by harnessing their positive traits, leveraging technology for engagement, and creating an environment that supports job satisfaction and creativity. By understanding and adapting to the unique characteristics of the millennial generation, organizations can effectively lead and engage this growing segment of the workforce.

3.5. Integration of Digital Technology with Transformational Leadership

3.5.1. Digital Technology as a Support Tool for Transformational Leadership

Digital technology has become an essential support tool for transformational leadership in modern organizations. Transformational leadership, which focuses on inspiring and motivating followers to achieve common goals, is further strengthened when combined with digital tools and strategies (Gachugu, 2023). Digital leadership, namely a combination of transformational leadership with technology, has been proven to be able to improve organizational performance by building a digital culture and strengthening employees' digital capabilities (Shin et al., 2023). This combination is critical for driving digital innovation and performance in large organizations (Shin et al., 2023).

Leaders who apply a digital transformational leadership style are better prepared to face the challenges posed by the digital era. They play a key role in envisioning and communicating their organization's digital future, understanding the impact of digital tools on the business, and empowering their teams to drive impactful digital transformation (Schiuma et al., 2021). In addition, digital leaders play an important role in directing and evaluating the digital transformation process in their organizations, ensuring that the process is aligned with overall strategic objectives (Khurniawan, 2024).

The inclusion of digital technology as a support tool for leadership decision making is very important in today's digital era. Organizations are encouraged to develop leadership training programs that integrate digital tools, cross-team collaboration, and communication skills to enhance leadership capabilities in the digital era ("Leadership Development Strategies of Human Resources in the Digital Era", 2023). In addition, the active involvement of leaders in the digital transformation process is crucial for its success, especially during challenging times such as the COVID-19 pandemic (Utomo et al., 2020).

Furthermore, the role of leaders in integrating digital transformation into organizations and inspiring employees to embrace change cannot be ignored. Leaders need to have strategic planning abilities, vision setting skills, and effective communication strategies to drive digital transformation successfully (Hu, 2023). By leveraging digital tools and creating a supportive environment, digital leaders can increase employee creativity and performance, ultimately contributing to organizational success (Öngel, 2023).

In conclusion, the integration of digital technology with transformational leadership is very important for organizations that want to develop in the digital era. Leaders who adopt a digital transformational leadership style, empower their teams, and leverage digital tools effectively are better equipped to drive innovation, improve performance, and navigate the complexities of the digital landscape.

3.5.2. Case Studies and Practical Examples

The integration of digital technology in organizations with transformational leadership is a critical aspect of modern business operations. Effective digital leadership, characterized by agility, digital literacy, openness to innovation, and a culture of continuous learning, is critical to successful digital transformation (Hung et al., 2023; Klein, 2020). Digital leadership enables

direction, leadership, and evaluation of an organization's digital transformation process, which ultimately influences organizational outcomes (Khurniawan, 2024). Studies emphasize that digital leadership plays an important role in the implementation of digital transformation, relying on digital resources and intelligence ("Research Status and Enhancement Path of Executive Digital Leadership in the Context of Enterprise Digital Transformation", 2024). In addition, the characteristics of digital transformation leadership are thought to involve fast and flexible actions in managing the organization's digital transformation (Purba, 2023).

Regarding the engagement and motivation of millennial employees in the digital era, leadership style plays an important role. Transformational leadership has been found to have a positive impact on job satisfaction, which in turn influences employee engagement (Su & Hahn, 2021). In addition, an ethical leadership style has been effective in motivating millennial employees and increasing their organizational citizenship behavior (Oksa et al., 2021). The use of social media platforms and collaborative technology in the workplace has implications for the well-being and motivation of millennial employees (Thileepan & Raveendran, 2022). Furthermore, dimensions of digital transformation, such as customer service and operational efficiency, have been shown to have a positive impact on employee engagement. In conclusion, the integration of digital technology with transformational leadership is critical for organizational success in the digital era. Effective digital leadership drives innovation, agility, and a culture of continuous learning, which are essential for driving digital transformation and increasing employee engagement and motivation, especially among millennials.

4. Conclusions

Transformational leadership significantly influences employee motivation, engagement, and performance in a positive way. Through an inspiring and motivating approach, this leadership not only increases productivity but also job satisfaction and innovation. Digital technology, as a support tool in an organizational context, strengthens transformational leadership by providing a platform for higher efficiency and effectiveness. Millennial employees, with their unique characteristics and preferences, show great potential in adapting and utilizing digital technologies, and require appropriate leadership approaches to improve their performance.

4.1. Implications

1. **Managerial Practice:** Organizations need to adopt transformational leadership to encourage motivation and innovation in the workplace, as well as use digital technology to improve management and communication processes. Implementing this leadership style can result in higher employee engagement and better performance.
2. **Employee Development:** By understanding millennial characteristics and utilizing technology, organizations can design more effective development programs, increase job satisfaction and reduce turnover. Leadership that supports employee autonomy and creativity will strengthen their engagement.
3. **Digital Transformation:** Leaders must integrate digital technologies in their leadership strategies to build an adaptive digital culture. Technology can be used to support the transformation process and strengthen leadership effectiveness.

4.2. Limitations

1. **Research Context:** This research may not fully cover a variety of organizational contexts or different sectors. The findings may be more relevant for organizations that are in certain sectors or at certain stages in the digital transformation process.

2. Generalization of Findings: This study may have limitations in terms of the generalizability of the findings to all generations of employees, especially in the context of cultural and geographic differences.
3. Dynamic Change: With the rapid development of technology and leadership dynamics, current findings may become less relevant over time. Further research is needed to address these changes.

4.3. Further Research

1. Exploration of Different Contexts: Further research could explore how transformational leadership and digital technologies affect employees in different sectors or types of organizations, including the public sector, nonprofits, or startups.
2. Long Term Analysis: Longitudinal studies are needed to understand the long-term impact of integrating digital technology with transformational leadership on employee performance and satisfaction.
3. Engagement of Different Generations: More in-depth research into how different generations, other than millennials, respond to transformational leadership and digital technology would provide greater insight into effective leadership strategies.
4. The Role of Organizational Culture: Understanding how organizational culture influences the effectiveness of transformational leadership and the adoption of digital technologies can also provide valuable guidance for managerial practice in various contexts.

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