

## Transforming Leadership Styles in Facing the Challenges of the Digital Era: A Systematic Literature Review

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Article history:

Received April 22, 2026

Revised May 28, 2026

Accepted May 29, 2026

### Abstract

The development of digital technology has brought significant changes to the way organizations operate, communicate, and manage human resources. This change requires a transformation in leadership styles that is not only oriented towards managerial skills, but also on technological mastery, flexibility, innovation, and the ability to build collaboration. This study aims to examine the transformation of leadership styles in facing the challenges of the digital era and identify relevant leadership models to support organizational success. The method used is a Systematic Literature Review (SLR) with the PRISMA approach through the stages of identification, selection, feasibility, and inclusion. Literature was obtained from Google Scholar using keywords related to leadership style transformation and leadership in the digital era. The results of the study indicate that leadership transformation occurs in various sectors, such as government, education, business organizations, and information services. The leadership styles that are often recommended are digital, transformational, adaptive, democratic, and participatory leadership. These styles play a role in improving communication, collaboration, innovation, employee engagement, learning quality, and the organization's ability to adapt to technological changes. Thus, leadership in the digital era requires a clear vision, empathy, openness to change, continuous learning capabilities, and the strategic use of technology to create an innovative, productive, and responsive organization.

### Keywords:

Digital Leadership; Digital Transformation; Leadership Style.

## 1. INTRODUCTION

In the digital era, rapid technological advancements have brought significant changes to the way leaders communicate and manage teams. This situation makes adapting and developing leadership styles crucial. Digital technology not only transforms organizational work processes but also influences the structure and leadership patterns within them. Therefore, leaders are required to adapt to technological innovations and implement a more open leadership style, while encouraging collaboration (Aninditha Sulistya Putri et al., 2025). The rapid development of digital technology has triggered fundamental changes in various aspects of life, including management and leadership patterns within organizations.

The digital era is characterized by technological disruption, automation, big data, artificial intelligence, and increasing connectivity. Rapid environmental changes, along with advances in communication technology and evolving societal perspectives, demand the adoption of leadership styles that are able to adapt to these conditions. Utilizing various available information technology media can support the communication process, monitoring, and evaluating the performance of organizational members more effectively (Nabila et al., 2023). Leadership transformation in the digital era is a crucial issue in human resource management, particularly in improving employee engagement in modern organizations. Changes in the organizational

landscape triggered by technological advances require leaders to adapt not only technically, but also strategically and emotionally (Sidik & Elfina, 2025).

In the digital era, leaders need digital skills and emotional agility to operate effectively in an environment full of uncertainty and complexity. Effective leaders are now required to operate through rapid and continuous learning cycles in decision-making and innovation development (Tulungen et al., 2022). This requires leaders not only to master technology but also to possess skills in adaptively managing teams, motivating them, and building trust through effective communication.

Transformational leadership has several key characteristics: idealized or charismatic influence, where the leader possesses the magnetism and authority to encourage subordinates to follow their direction. Furthermore, inspirational motivation is the leader's ability to inspire subordinates to achieve predetermined targets. Another characteristic is intellectual stimulation, which is the leader's ability to encourage subordinates to think creatively in solving various problems. Finally, individual consideration, where the leader is able to understand and appreciate the differences in character and needs of each subordinate (Yayuk Zulaikah et al., 2024).

The transformation of leadership styles in the digital era is determined not only by a leader's technical skills but also by their capacity to build emotional and psychological connections with team members. In a digital work environment, limited physical interaction often reduces opportunities for interpersonal closeness. Therefore, leaders need to develop new strategies to maintain authentic and supportive relationships with team members (Newman et al., 2020). Leaders are also required to be able to interpret social signals through digital communication, such as the tone of messages, expressions in virtual meetings, and team members' response patterns. In this context, authentic leadership plays a crucial role because it has been proven to increase psychological safety within a team, namely the condition when members feel safe to express their opinions without fear of negative consequences (Gupta & Singh, 2023).

Managerial decisions made by executives, based on the understanding and interpretation of business actors, directly impact a company's performance and results. Therefore, the role of leadership is crucial in effectively managing resources to ensure future business sustainability (Nilam Erman, 2024). Leaders are required not only to possess technical competence but also the ability to lead virtually, manage cross-generational teams, and create a culture of innovation that supports technological development.

Furthermore, leaders must be able to maintain a balance between the application of technology and humanistic values to maintain interpersonal relationships (Tri Budi Rochmanto, Devi Lisnawati, n.d.). This transformation in leadership style is crucial because the challenges of the digital era are not only technical but also involve changes in culture, work patterns, and employee expectations (V. T. Pratama, 2023). Therefore, this study aims to examine how leadership styles are transforming in response to the challenges of the digital era and to identify effective leadership models to support organizational success.

## 2. RESEARCH METHOD

This study employed a Systematic Literature Review (SLR) approach using the PRISMA method. The article selection process involved four stages: identification, selection, eligibility, and inclusion. Literature sources were obtained from the Google Scholar database using the keywords "Leadership Style Transformation" AND "Leadership Style in the Digital Era."

The identification stage identified 345 articles relevant to the initial search terms. Next, the selection stage involved screening based on the title's suitability to the research topic, namely "Leadership Style Transformation in the Digital Era." This process resulted in 300 articles being screened. The next stage was the eligibility assessment, which involved applying inclusion and exclusion criteria. Inclusion criteria included journals or articles discussing leadership styles in the digital era, while exclusion criteria included articles outside the 2018–2025 publication window, articles with inappropriate abstracts, and articles that were not open access. Based on this eligibility stage, 75 articles met the criteria. The final stage, inclusion, determined which articles were truly suitable and used in the study. After going through the entire selection process, 56 articles were selected as articles to be included in this study. (Dina Selvia, *et al.*, 2025). The following is a Chart in the research method.

### LEADERSHIP STYLES IN THE DIGITAL ERA

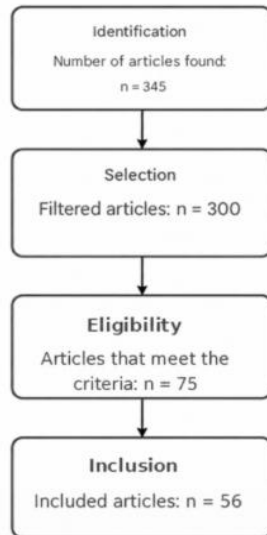


Figure 1. Chart Research Method

#### PRISMA Stages

- Identification. The initial stage involves collecting all articles or literature sources from various databases, such as Scopus, Google Scholar, and PubMed. All search results are then compiled, and duplicate articles are removed.
- Screening. At this stage, articles are screened through titles and abstracts to determine their relevance to the research topic. Articles that do not meet the criteria are excluded.
- Eligibility. Articles that pass the selection stage are then thoroughly reviewed through full-text reading. This process aims to ensure that the articles meet the inclusion criteria, such as year of publication, research methods, and focus of the study. Articles that do not meet methodological or relevant criteria are excluded.
- Inclusion. Articles that meet all criteria are then included in the systematic review. If the research proceeds to meta-analysis, only articles with appropriate quantitative data are used in the analysis.

### 3. RESULTS AND DISCUSSION

In this section, the researcher conducts a comprehensive analysis and verifies the distribution of research articles discussing leadership style transformation based on article classification, theoretical basis, research level, studied variables, research context, and independent variables. Of the 75 articles that met the criteria, 56 were fully accessible and downloadable. These articles then served as the basis for the analysis, conducted in this study based on predetermined selection criteria. Next, the results of the literature review are presented.

#### 3.1. Government Sector

The role of leaders in encouraging the use of information technology in the government sector is an unavoidable necessity. Digital leadership is a crucial element in supporting and ensuring the successful implementation of digital transformation within the government (Tulungen et al., 2022). Based on a case study conducted at the Pacitan Regency Tourism Office, changes in leadership style were found among the same leaders in leading the organization under two different conditions: before and during the pandemic. In the pre-pandemic period, the leadership style at the Tourism Office tended to be bureaucratic, with leaders exercising authority based on applicable organizational rules and regulations, accompanied by the implementation of sanctions for violations. Meanwhile, during the pandemic, there was a shift in leadership style toward transformational leadership as a means of adapting to the crisis situation. However, this change in leadership style did not significantly impact the achievement of organizational targets and performance results (Yayuk Zulaikah et al., 2024). Based on the theory proposed by Rex P. Gatto on leadership style, it can be concluded that the leadership style of the Head of the Padang City Financial and Asset Management Office, Mr. Syahrul, S.E., M.Si., is a consultative leadership style. The leader provides discretion with some control, seeks advice and criticism (consultation) in decision-making, resolves conflicts through dialogue, builds communication and interaction, and provides guidance and advice to subordinates so that they feel valued and recognized (Krismena Tovalini, 2021).

Transformational leadership has a significant positive impact on employee motivation and performance at the Tanggamus Regency Education Office. Leaders who employ this leadership style tend to provide inspiration, build more harmonious working relationships, and encourage innovation in the workplace (Pramono et al., 2025). Consistent with research by Rae, COSO, and Sudarta (2008), the results of this study demonstrate that leadership style influences the effectiveness of internal control in regional government agencies (OPD) in Padang City. This is because agency leaders in Padang City have good relationships with their subordinates. A well-organized structure and a well-defined division of tasks among agency employees have led to effective internal control within OPDs throughout Padang City. It can be concluded that leadership style influences the effectiveness of internal control in OPDs in Padang City, as the better the relationship between leaders and their subordinates, the better the internal control (Satria & Mia Angelina Setiawan, 2020). Strategic Leadership in Organizations and Governments in the Digital Age is a leadership style that integrates leadership skills with the use of information and communication technology to direct effective digital transformation to achieve organizational or government goals. This leadership requires a strategic vision that is adaptive to technological change, innovation in policy, and the ability to effectively manage collaboration and human resources across generations in a digital environment (Maulidiya et al., 2025).

Based on the analysis of the leadership type possessed by Mr. Muktar Effendi is a democratic leadership type as proven by the results of interviews with several Kembangbelor village officials. Mr. Muktar Effendi prioritizes deliberation for decision making and resolving disagreements both internally and externally, he is open to receiving all criticism, suggestions, and opinions that come from village officials/community both directly and indirectly, all have the same level of participation opportunities without any differences (Yahya, 2022). Transformational leadership has proven effective in encouraging innovative employee behavior, particularly in the context of digitalizing public services. This leadership style can inspire, motivate, and empower employees to adapt to technological changes and improve service quality (Intan Nuraeni, Nurhayati, Silma Taufiqoh, Gunardi, 2025).

### 3.2. Education Sector

Leaders who demonstrate authenticity in digital communication—such as consistent use of language, acknowledgment of limitations, and clarity in providing direction—can improve psychological safety and team engagement. Psychological safety is crucial in educational organizations because it encourages teachers to fearlessly share ideas, express opinions, and try new approaches to digital learning (Prianti et al., 2025). Ideal principal leadership in the digital era is one that is able to keep pace with technological developments. In this regard, principals are required to play an active role in influencing, mobilizing, and guiding all school members to implement educational programs aligned with technological advances in the Industrial Revolution 4.0 era (Rosita & Iskandar, 2022). Based on the literature review and collected research, the results of the digital leadership transformation process in elementary schools, which encompasses various important aspects such as efficiency, communication, transparency, learning quality, digital skills development, resource efficiency, and decision-making, have a positive impact on the educational process and ensure that the education system remains relevant in an increasingly complex and digitally connected future (Damayanti et al., 2024). Principal leadership transformation in the digital era presents significant challenges, such as technology adaptation, resistance to change, and increasing teachers' digital capacity, but also opens up strategic opportunities for educational innovation (Mukaddamah & Kusumanegara, 2025).

Facing technological developments requires a combination of various leadership approaches tailored to the context and challenges faced. No single leadership style can be universally applied to every situation, so educational leaders are required to be adaptive and open in combining various leadership strategies. This way, educational institutions can be led effectively in the face of technological change, so that digital transformation is not only accepted but also utilized to improve the overall quality of education (Patodingan et al., n.d.). Changes in the principal's leadership style in the digital era, particularly in the implementation of technology-based educational administration at Muhammadiyah Middle School Tanah Grogot, have been shown to significantly improve student learning outcomes (Rosmini et al., 2024). Leadership in Islamic education is not only about managing educational institutions, but also about instilling strong Islamic moral values and ethics in students, which is crucial in an effort to face current developments and meet the needs of Muslims for quality education aligned with the digital era (Yahya Romandoni, 2024). Transformational leadership is considered to have a very important role because leaders are required to be able to motivate librarians to increase trust, moral values, perceptions, and cooperation among them. These efforts are necessary to optimally achieve the library's goals, particularly in meeting the information needs of users (Husna, 2019).

Based on the research results, it can be concluded that the implementation of transformational leadership by principals has a positive influence on improving teacher performance in the digital era. Principals who are able to inspire, motivate, and empower teachers through a clear vision and ongoing support are able to improve digital competence and innovation in learning (Ahsan, 2025). The Principal's Leadership Style has a positive and significant effect on the Digitalization of Learning in Public Elementary Schools in Paguyangan District, Brebes Regency, as evidenced by the correlation between the principal's

leadership style and the digitalization of learning of 0.974, which is included in the high category. The principal's leadership style has a positive effect on the digitalization of learning, indicated by R of 94.8% with the regression equation  $Y = -2.506 + 1.269X_1$  (Kusumaningsih, 2024).

### 3.3. Organizational/Business Sector

The digital era has brought significant changes in the way individuals and organizations interact, increasing open communication both internally and externally, strengthening relationships with consumers, and expanding knowledge sharing processes. Future leaders are expected to be able to bring creative ideas to the organization, creating a conducive environment. Open to failure, and possessing the ability to encourage risk-taking as part of innovation efforts (Rajagukguk, 2024). The concept of digital leadership refers to a leader's ability to utilize digital technology to manage, motivate, and inspire teams and organizations. Digital leadership is not only related to mastery of technological devices or tools, but also emphasizes understanding the cultural and mindset changes that emerge as a result of digital transformation (Aninditha Sulistya Putri et al., 2025). In the digital context, Adaptive Leadership plays a crucial role in distinguishing between problems that can be solved with technology (technical) and problems that require behavioral change (adaptive). For example, implementing a cloud computing system is a technical challenge, but changing employee habits to share data openly and collaborate across functions is an adaptive challenge (Mulyana, 2025). Digital leaders are required to possess a set of skills capable of addressing various challenges and supporting the organization in facing the transition process. Therefore, new competencies are needed so that leaders can effectively direct organizations towards a future full of uncertainty and dynamics, where the role of leaders has a very significant influence (Wujarso et al., 2023). Digital leaders play a crucial role in guiding organizations through technological transformation, fostering digital collaboration, and creating a flexible and adaptive work environment. Digital leadership enables open communication and leverages technology to support active employee participation, ultimately enhancing their sense of belonging and engagement within the organization (Muhammad Sidik et al., 2025). Digital transformation has brought significant changes to the way organizations operate and lead. According to Schwab (2017), the era of digital transformation is characterized by rapid technological developments and changing business landscapes that demand rapid adaptation from organizations and their leaders. This creates an urgent need for leaders to develop adaptive and flexible skills to ensure their organizations remain competitive and innovative (Norman et al., 2024). Effective leadership is determined not only by mastery of managerial skills, but also by the leader's ability to demonstrate empathy, build effective communication, and utilize technology to enhance collaboration and encourage innovation (Rizky et al., 2025).

According to Kotter, as cited by Garima, although digitalization is changing the way organizations operate, organizations will never change on their own. An organization's transformation depends on its leaders, both in terms of vision and decision-making, which will link it to change (Yaminah et al., 2023). It is stated that successful leaders in the digitalization process need to have a clear vision, be customer-oriented, and be open to change. Digital leadership is also supported by several factors, such as a more controlled and egalitarian hierarchical structure, high team engagement, digital intelligence, and active engagement in the digital environment through collaboration and partnerships (Hanita, 2023). Transformational leadership has been shown to significantly impact team productivity in the digital era. Based on data analysis, leaders who implement a transformational leadership style can positively impact the performance and productivity of their teams (vidiel T. Pratama, 2023). Future leaders bring intelligent organizational thinking, allow talent to thrive, and are able to encourage risk development as an innovative process. A key strategy is cognitive transformation, where leaders continuously update their digital knowledge and skills through continuous learning, including the use of artificial intelligence, data analytics, and various cutting-edge technology platforms (Syah Bila & Ahmad, n.d.). Leaders must be leading examples in implementing the 5Rs (Ringkas, Pipi, Resik, Rawat, Rajin). They not only provide instructions but also engage directly, provide clear direction, and demonstrate discipline, cleanliness, and organization. The recommended leadership style is participatory and transformational, which allows employees to express their opinions and encourages positive changes in work behavior (Sarumaha et al., 2024).

The leadership style of the Head of the Corporate Communications Division at PT Kalimantan Prima Persada (KPP Mining) directly influences employee motivation. A flexible and responsive leadership approach to the team's needs and circumstances has been shown to increase employee morale and engagement in achieving shared goals (Gladis et al., 2025). The results of the study indicate that transformational leadership has a positive and significant effect on employee performance, which aligns with the initial hypothesis proposed in the study. Leaders who employ a transformational leadership style, by providing inspirational motivation and intellectual stimulation, can increase employee enthusiasm, creativity, and commitment to organizational goals (Mulyadi, 2025). Based on research conducted on several MSMEs in Banyuwangi Regency, it can be concluded that the leadership style of business owners has a significant influence on their economic performance, particularly in facing the challenges and opportunities of the digital era. First, a transformational leadership style has been proven to significantly drive business economic growth. MSME owners who implement this leadership style not only provide direction and motivation but also encourage innovation and adaptation to digital technology. With inspirational leadership, employees

become more proactive and productive, enabling businesses to expand their markets and significantly increase revenue (Purnomo et al., 2025).

This study highlights the importance of transformational leadership in improving team productivity in the digital age. Organizations that invest in developing transformational leadership and create an environment that supports innovation and collaboration can gain a sustainable competitive advantage in this ever-changing market (Pratama, 2023). This study proves that leadership style has a negative and significant effect on turnover intention, while work stress has a positive and significant effect on turnover intention in Generation Z employees at PT Win Era Digital. An effective leadership style can suppress employees' intention to leave the organization (Safira et al., 2026).

### 3.4. Leadership Style

Transformational leaders must be able to define, communicate, and articulate the organization's vision, and subordinates must accept and acknowledge their leader's credibility (Bashori, 2019). Transformational leadership can have a significant impact on an organization's ability to overcome crises in the digital age (Erman & Winario, 2024). In the Society 5.0 era, the implementation of an appropriate leadership style tends to be a combination of democratic and laissez-faire leadership. This is because people in the Society 5.0 era generally have higher levels of knowledge and education than those in the previous era. talent in the past. Unlike past conditions that tended to require an authoritarian leadership style due to limited understanding of situations and problems, today's society is more capable of critical thinking and active participation in the decision-making process (Fakhriyah Imtinan, 2021). Leadership in the digital era also demands a balance between technological intelligence and emotional intelligence (Amirah et al., 2025). A leader with democratic and visionary characteristics must be able to anticipate every change that occurs, utilize advances in the digital era to support leaders in achieving their goals and continue to ensure training and development of the abilities of each group member in utilizing technological developments and a leader who has a strong determination to be able to learn from time to time (Sarumaha et al., 2024). Delegative leadership in the digital age is a highly effective approach when applied appropriately to achieve established goals. Delegative leadership, utilizing technology, creates effectiveness for the organization, its employees, and its partners, empowers both those led and those following, fosters global collaboration, and fosters an effective organizational work culture (Sarumaha et al., 2024).

Experts offer various leadership concepts to help institutions adapt to changing contexts, but this article only offers three fundamental leadership styles for navigating the era of disruption: situational leadership, transformational leadership, and servant leadership. These three styles of leadership are closely interconnected in driving institutional function (Sarumaha et al., 2024). Effective leadership within the millennial generation requires a deep understanding of their characteristics and expectations. Transformational and democratic leadership styles have been shown to be effective in motivating and engaging millennials. Conversely, laissez-faire and transactional styles may require adjustments to better align with millennial preferences and needs (Palupi, 2024). In the digital age, successful leadership is not only about having strong managerial skills, but also the ability to lead with empathy, communicate effectively, and use technology to foster collaboration and innovation. With this evolution of leadership styles, organizations are expected to create environments that are more productive, innovative, and responsive to rapid change, while also being able to deliver greater value to employees and stakeholders in the long term (Febrian Rizky Anugrah Putra, 2025). That the transformative leadership style is very useful for increasing motivation, performance and organizational commitment in public organizations, business organizations, and social organizations, and the transformative leadership style is suitable for employees from generation Z (Febrian Rizky Anugrah Putra, 2025). Effective leadership in managing the market aspects of a business is based on professional authority and a participatory approach that involves consumers in developing targeted marketing strategies. A participatory leadership style has proven effective in addressing challenges in formulating or resolving complex problems (Yeremia Niaga Atlantika, Sabinus Beni, 2026).

Digital leaders play a critical role in guiding organizations through technological transformation, fostering digital collaboration, and creating a flexible and adaptive work environment. Digital leadership enables open communication and leverages technology to support active employee participation, ultimately enhancing their sense of belonging and engagement within the organization (Sidik & Elfina, 2025). The development of digital technology has also influenced leadership within an organization, which is crucial in motivating members to achieve organizational goals. Achieving organizational goals is a primary focus, and digitalization has shifted organizational culture toward greater efficiency (Permana et al., 2023). Authentic leadership styles, empowering leadership styles, ethical leadership styles, and benevolent leadership styles have been shown to have a positive and significant relationship with innovative work behavior. Empowering leadership styles are the leadership style that contributes most to the development of innovative work behavior among employees in digital-based organizations, compared to authentic leadership styles, ethical leadership styles, and benevolent leadership styles (Etikariena, 2020). Data-Driven Leadership demonstrates that big data has played a significant role in transforming modern leadership styles across various sectors. By leveraging evidence-based data, leaders can make faster, more accurate, and more objective decisions, reducing the bias that can arise from intuitive decisions (Sinurat et al., 2025).

A review of the collected articles shows the influence of effective leadership and transformational leadership from a business organization leader. Appropriate leadership can overcome low employee performance in a company. Behavior related to an employee's work activities in a company is called employee performance. In this study, there are three variables that determine performance, and three of them are leadership, motivation, and job satisfaction (Suratno, 2024). An analysis of the effectiveness of transformational leadership in establishing organizational policy in the digital era highlights the importance of leaders adapting to rapid technological change and evolving organizational dynamics. The practical implications of this analysis emphasize the need to develop leaders who are not only able to motivate and inspire, but also possess a strong understanding of technology and innovation (Mira Veranita, Purwadhi, 2024). Leadership success is no longer determined solely by physical presence, but rather by the ability to present a strong vision, convey messages inspiringly, and foster collaboration through various digital media. The use of platforms such as video conferencing, collaborative applications, and social media has become a crucial tool in strengthening interactions and accelerating decision-making. The quality of transformational leadership depends heavily on a leader's ability to combine technological aspects and human values in communication (Hutagalung et al., 2025).

Adaptive leadership has proven to be key to navigating the rapid changes and challenges of the digital age. Leaders who can adapt to new situations, technologies, and team dynamics will be more effective in building a positive work culture (Rofiyana & Aziz, 2024). In this increasingly advanced and rapidly changing digital era, traditional leadership styles that emphasize hierarchy, strict control, and one-way instructions are showing their limitations when faced with the character and expectations of Generation Z employees. This generation, born in a digital and tech-savvy environment, values flexibility, authenticity, openness, and the opportunity to contribute authentically. Therefore, effective leaders today must not only master digital literacy, namely understanding and utilizing technology as a strategic tool, but also must have high emotional intelligence: being able to listen, understand, and maintain human relationships within the team (Fitria Amirah, 2025).

#### 4. CONCLUSION

Based on studies and research, the most suitable leadership style for the digital era is transformational leadership combined with digital, adaptive, participatory/democratic, and data-driven leadership. Transformational leadership is important because leaders must be able to provide a clear vision, motivate, inspire, and empower organizational members to be ready to face technological change. Furthermore, digital-era leaders must also be technologically literate, able to use digital media for communication and collaboration, and maintain humanistic values such as empathy, openness, and emotional intelligence. This is evident in various articles that emphasize the importance of leaders who can adapt to technology, foster innovation, and create a collaborative and flexible work environment.

Therefore, appropriate leadership in the digital era is not a single style, but rather a combination of several leadership styles. Transformational leadership is suitable for building motivation and change; digital leadership is suitable for directing the use of technology; adaptive leadership is suitable for dealing with rapid change; democratic/participatory leadership is suitable for involving members in decision-making; and data-driven leadership is suitable for making more accurate decisions based on data. Therefore, in conclusion, digital-era leaders must be visionary, open to innovation, skilled in using technology, communicative, empathetic, and able to encourage collaboration within the organization.

#### REFERENCES

- Ahsan, M. (2025). Kepemimpinan transformasional kepala sekolah dalam meningkatkan kinerja guru di era digital. 6(10), 1635–1646. <https://doi.org/10.57171/xzntkp81>
- Amirah, F., Wulandari, R., & Zalsabila, R. (2025). Systematic Literature Review: Tantangan dan Strategi Kepemimpinan di Era Digital dalam Mengelola Generasi Z. *Journal of Psychology Today*, 3(4), 263-271.
- Bashori, B. (2019). Transformasi Kepemimpinan Perguruan Tinggi Dan Jejaring Internasional. *PRODU: Prokurasi Edukasi Jurnal Manajemen Pendidikan Islam*, 1(1). <https://doi.org/10.15548/p-prokurasi.v1i1.1153>
- Burhan, A. W. (2024). Pengaruh Organizational Culture, Perceived Organizational Support, dan Self Efficacy terhadap Employee Engagement dengan Mediasi Digital Transformation di BNI KC Yogyakarta (Doctoral dissertation, Universitas Islam Indonesia).

- Damayanti, S., Setiawan, W. D., Pangestu, S. E., Pribadi, S. A., & Argadinata, H. (2024). Transformasi kepemimpinan digital sekolah dasar dalam menuju efisiensi dan transparansi di era digital. *Proceedings Series of Educational Studies*, (6), 1-9.
- Efrita Norman, & Enah Pahlawati. (2024). Pengembangan Kepemimpinan yang Adaptif dan Fleksibel: Meningkatkan Ketahanan Organisasi di Era Transformasi Digital. *MES Management Journal*, 3(1), 298 –. <https://doi.org/10.56709/mesman.v3i1.314>
- Erman, N., & Winario, M. (2024). Kepemimpinan Transformasional Terhadap Kemampuan Organisasi dalam Mengatasi Krisis Di Era Digital. *Innovative: Journal Of Social Science Research*, 4(1), 11022–11034. <https://doi.org/10.31004/innovative.v4i1.8936>
- Etikariena, A. (2020). Peran gaya kepemimpinan pada perilaku kerja inovatif karyawan pada organisasi berbasis teknologi digital. *Jurnal Ecopsy*, 7(1). doi:<http://dx.doi.org/10.20527/ecopsy.v7i1.8426>
- Fakhriyah Imtinan, N. (2021). Gaya kepemimpinan dalam menghadapi era Society 5.0. *Jurnal Kependidikan Islam*, 11(2), 198–207. <https://doi.org/10.15642/jkpi.2021.10.2.226-251>
- Fauziah, R. G. M., & Santoso, H. (2025). Gaya Kepemimpinan Corporate Communication KPP Mining Dalam Meningkatkan Motivasi Di Era Digital. *Petanda: Jurnal Ilmu Komunikasi dan Humaniora*, 7(2), 239-258. <https://doi.org/10.32509/petanda.v7i2.5312>
- Hanita, M. (2023). Transformasi ketahanan wilayah pada era digital: Peran kepemimpinan digital dalam membangun smart city di Kota Pariaman Sumatera Barat. *Jurnal Ketahanan Nasional*, 29(2), 199. <https://doi.org/10.22146/jkn.86067>
- Herminingsih, A., & Hamidah, P. (2024). Pengaruh Kepemimpinan Transformasional Kepuasan Kerja dan Kompensasi Non Finansial terhadap Employee engagement. *Co-Value Jurnal Ekonomi Koperasi dan kewirausahaan*, 14(10). <https://doi.org/10.59188/covalue.v14i10.4302>
- Herpayanti Rajagukguk, P., & Suryanto. (2024). Studi Literatur: Peran Transformasi Kepemimpinan dalam Manajemen Strategis di Era Digital. *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 5(6), 3097–3102. <https://doi.org/10.38035/jmpis.v5i6.3214>
- Husna, J. (2019). Transformasi kepemimpinan bagi pustakawan di era digital. *Jurnal Ilmu Perpustakaan*, 7(1). <http://dx.doi.org/10.21043/libraria.v7i1.4971>
- Imtinan, N. F. (2021). Gaya Kepemimpinan dalam Menghadapi Era Society 5.0. *Jurnal Kependidikan Islam*, 11(2), 189–197. <https://doi.org/10.15642/jkpi.2021.11.2.189-197>
- Indra Permana, Ilmi Gunardi, Bayu Tri Pratomo, Muhamad Zaenal Arifin, & Imam Kurnianto. (2023). Manajemen Kepemimpinan Era Digital: Konsep, Gaya dan Pengembangan Kepemimpinan pada Generasi Milenial dan Z. *BULLET: Jurnal Multidisiplin Ilmu*, 2(3), 673–680. Retrieved from <https://journal.mediapublikasi.id/index.php/bullet/article/view/3022>
- Intan Palupi, N. W. (2024). Menggali Teori dan Efektivitas Gaya Kepemimpinan bagi Generasi Milenial. *Jurnal Akuntansi, Manajemen Dan Ilmu Ekonomi (Jasmien)*, 5(01), 158–166. <https://doi.org/10.54209/jasmien.v5i01.747>
- Kusumaningsih, W. (2024). Pengaruh Gaya Kepemimpinan Kepala Sekolah dan Motivasi Kerja Guru terhadap Digitalisasi Pembelajaran di Sekolah Dasar Negeri. 5(1), 329–337. <https://doi.org/10.51874/jips.v5i1.230>
- Maulidiya, J., Juliana, D., Putri, R. E., Gunardi, G., & Mustiraya, R. (2025). Kepemimpinan Strategik dalam Organisasi dan Pemerintahan di Era Digital. *JURNAL MANAJEMEN & BISNIS*, 1(1), 41-49.
- Miftah, H., Modding, B., & Dahlia, D. (2024). Pengaruh gaya kepemimpinan transformasional dan iklim organisasi melalui employee engagement terhadap kinerja karyawan pada PT. Pelabuhan Indonesia (Persero) Regional 4 Makassar. *Journal of Accounting and Finance (JAF)*, 5(1), 12–27. <https://doi.org/10.52103/jaf.v5i1.1859>

- Muhammad Sidik, Sumardin, S., Sabri, S., & Elfina, R. (2025). Transformasi kepemimpinan di era digital: Dampaknya terhadap employee engagement di organisasi modern. *MANABIS: Jurnal Manajemen dan Bisnis*, 4(2), 182–195. <https://doi.org/10.54259/manabis.v4i2.4843>
- Mukaddamah, I. (2025). Transformasi Kepemimpinan Kepala Sekolah di Era Digital: Tinjauan Literatur tentang Tantangan dan Strategi Inovatif. *Hikamatzu| Journal of Multidisciplinary*, 2(2).
- Mulyadi, D. (2025). Dampak Kepemimpinan Transformasional terhadap Kinerja Karyawan di Era Digital pada Perusahaan Teknologi di Indonesia. *Jurnal Kajian Ekonomi Dan Manajemen Indonesia (JKEMI)*, 3(1), 21–34. <https://doi.org/10.61079/jkemi.v3i1.136>
- Mulyana, I. (2025). Transformasi gaya kepemimpinan di era digital: Tinjauan literatur tentang kepemimpinan adaptif dan agile. *Jurnal Literasi Indonesia*, 2(10). <https://jli.staiku.ac.id/index.php/st/index>
- Nabila, T. W., Febriarhamadini, R., Rosalina, S. S., & Setyaningsih, R. N. (2023). Gaya kepemimpinan di era pandemi Covid-19. *Widya Cipta: Jurnal Sekretari dan Manajemen*, 7(2), 177–184. <https://doi.org/10.31294/widyacipta.v7i2.15866>
- Nilam Erman, & M. Winario. (2024). Transformasi kepemimpinan dalam manajemen strategis di era digital: Tinjauan literatur review. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi dan Perbankan Syariah*, 9(204), 290–297. <https://doi.org/10.30651/jms.v9i1.21057>
- Ningsih, F., & Suryosukmono, G. (2024). Pengaruh e-leadership dan e-culture terhadap produktivitas kerja yang dimediasi oleh work engagement. *Distribusi: Journal of Management and Business*, 12(1), 1–14. <https://doi.org/10.29303/distribusi.v12i1.423>
- Nuraeni, I., Nurhayati, N., Taufiqoh, S., Gunardi, G., & Permatasari, A. (2025). Analisis Gaya Kepemimpinan Transformasional dalam Mendorong Perilaku Inovatif Pegawai pada Digitalisasi Pelayanan Publik. *JURNAL MANAJEMEN & BISNIS*, 1(1), 13-26.
- Patodingan, L., Julfani, F. M., & Resti, I. P. (2024). Kepemimpinan Berkelanjutan dalam menghadapi tantangan pendidikan di era digital. *Jurnal Pendidikan Dan Keguruan*, 2(10), 1905-1921.
- Pramono, E., Hadjar Aswad, F., & Siswoyo. (2025). Gaya Kepemimpinan dan Kinerja Pegawai: Studi Kasus di Dinas Pendidikan Kabupaten Tanggamus. *Manajemen Pendidikan*, 20(1), 85–95. <https://doi.org/10.23917/jmp.v20i1.10701>
- Pratama, V. T. (2023). Pengaruh Kepemimpinan Transformasional Terhadap Produktivitas Tim di Era Digital. *Innovative: Journal Of Social Science Research*, 3(5), 4509–4516. Retrieved from <https://j-innovative.org/index.php/Innovative/article/view/5403>
- Prianti, N., Darlina, N., Gistituati, N., Rusdinal, R., & Nellitawati, N. (2025). Transformasi Gaya Kepemimpinan Menuju Era Digital: Analisis Kepemimpinan Supportive dan Authentic Dalam Organisasi Pendidikan. *Jurnal Kepemimpinan dan Pengurusan Sekolah*, 10(4), 2214-2224. <https://doi.org/10.34125/jkps.v10i4.1155>
- Purnomo, H., Faizal, A., & Mubarak, A. H. (2025). Peran Gaya Kepemimpinan Pemilik UMKM terhadap Kinerja Ekonomi Usaha di Era Digital. *Jurnal Manajemen Dan Ilmu Administrasi*, 1(1), 78–84. <https://doi.org/10.58472/jmia.v1i1.101>
- Putra, F. R. A., & Priyatmono, B. (2025). Analisis Perubahan Kepemimpinan Di Era Perkembangan Digital Yang Pesat Pada Masyarakat. *Jurnal Dinamika Sosial Dan Sains*, 2(4), 663-669. <https://doi.org/10.60145/jdss.v2i4.152>
- Putra, F. R. A., & Priyatmono, B. (2025). Analisis Perubahan Kepemimpinan Di Era Perkembangan Digital Yang Pesat Pada Masyarakat. *Jurnal Dinamika Sosial Dan Sains*, 2(4), 663-669. <https://doi.org/10.60145/jdss.v2i4.152>
- Putri, A. S., Wijaya, F. R., Anindya, N. E., Fauzia, Z. D., & Febriantina, S. (2025). Evolusi Gaya Kepemimpinan dalam Era Digital. *Jurnal Ilmiah Ekonomi Dan Manajemen*, 3(1), 141-150. <https://doi.org/10.61722/jiem.v3i1.3399>

- Rika Elisa Hutagalung, Nicolas Saputra Sihombing, Maria Angelina Br Saragih, & Rotua Sahat P Simanullang. (2025). Kajian Kepemimpinan Transformasional Dalam Era Digital: Penelitian. *Jurnal Pengabdian Masyarakat Dan Riset Pendidikan*, 4(2), 8505–8508. <https://doi.org/10.31004/jerkin.v4i2.3245>
- Rochmanto, T., Lisnawati, D., & Haryati, T. (2022). Pemimpin Yang Dibutuhkan Direktorat Koordinasi dan Supervisi Wilayah IV KPK Saat Pandemi. *Jurnal UDA*, 30(3), 298 - 318. doi:10.46930/ojsuda.v30i3.2258
- Rofiyana, M., Aziz, A., Rifqi, R., Salma, S., & Salwa, A. (2024). Pengaruh Kepemimpinan Adaptif Di Era Digital Dalam Usaha Membangun Budaya Positif Untuk Tim yang Tangguh. *Innovative: Journal Of Social Science Research*, 4(5), 476–483. <https://doi.org/10.31004/innovative.v4i5.13998>
- Romandoni, I. Y., Sulistyorini, & Nur Efendi. (2024). Transformasi Kepemimpinan Pendidikan Islam: Tantangan dan Peluang di Era Digital. *Tadbir: Jurnal Manajemen Pendidikan Islam*, 12(2), 194–209. <https://doi.org/10.30603/tjmpi.v12i2.4932>
- Rosita, R., & Iskandar, S. (2022). Gaya Kepemimpinan Kepala Sekolah di Era Digital. *Jurnal Basicedu*, 6(4), 6005–6011. <https://doi.org/10.31004/basicedu.v6i4.3127>
- Rosmini, H., Ningsih, N., Murni, M., & Adiyono, A. (2024). Transformasi kepemimpinan kepala sekolah pada era digital: Strategi administrasi pendidikan berbasis teknologi di sekolah menengah pertama. *Konstruktivisme: Jurnal Pendidikan dan Pembelajaran*, 16(1), 165–180. <https://doi.org/10.35457/konstruk.v16i1.3451>
- Safira, P. V., & Syihabuddin, M. (2026). Pengaruh Gaya Kepemimpinan dan Stres Kerja terhadap Turnover Intention di Mediasi Kepuasan Gen Z PT Win Era Digital. *JURNAL ILMIAH EKONOMI DAN MANAJEMEN*, 4(2), 299-312. <https://doi.org/10.61722/jiem.v4i2.8730>
- Satria, I., & Setiawan, M. A. (2020). Pengaruh kualitas audit, lingkup audit dan gaya kepemimpinan terhadap efektivitas pengendalian internal di sektor pemerintah. *Jurnal Eksplorasi Akuntansi*, 2(1), 2466-2478. <https://doi.org/10.24036/jea.v2i1.223>
- Selvia, D., Hasipa, H., Anjani, S., Nurizkia, R., Depyanti, S., Ridwan, H., & Sutresna, I. (2025). Systematic Literature Review: Pengaruh Gaya Kepemimpinan Transformasional Dengan Kejadian Burnout Pada Perawat. *Jurnal Ilmiah Wahana Pendidikan*, 11(6.D), 66-82. Retrieved from <https://jurnal.peneliti.net/index.php/JIWP/article/view/12033>
- Sidik, M., & Elfina, R. (2025). Transformasi kepemimpinan di era digital: Dampaknya terhadap employee engagement di organisasi modern. *MANABIS: Jurnal Manajemen dan Bisnis*, 4(2), 182–195. <https://doi.org/10.54259/manabis.v4i2.4843>
- Sinurat, B., Kamila, M. C., Safitri, N., & Ansori, M. I. (2025). Kepemimpinan Berbasis Data: Bagaimana Big Data Mempengaruhi Gaya Kepemimpinan Modern. *Innovative: Journal Of Social Science Research*, 5(3), 1529–1543. <https://doi.org/10.31004/innovative.v5i3.18656>
- Suratno, E. (2024). A Literature Review: The Influence of Effective Leadership and Transformational Leadership on Employee Performance in Business Organizations in the Digital Era. *IJOSPOL - International Journal of Social, Policy and Law*, 5(1), 15-28. <https://doi.org/10.8888/ijospl.v5i1.165>
- Syah Bila, B., & Ahmad, A. (2025). Peran dan strategi cerdas kepemimpinan dalam transformasi era digital. *Jurnal Dinamika Pendidikan Nusantara*, 6(2).
- Tovalini, K., & Hanoselina, Y. (2021). Kepemimpinan Sektor Publik: Studi Mengenai Gaya Kepemimpinan Kepala Dinas Pengelolaan Keuangan dan Aset Pemerintah Kota Padang. *Jurnal Ilmiah Pendidikan Scholastic*, 5(2), 60-66. <https://doi.org/10.36057/jips.v5i2.485>
- Tulungen, E. E., Saerang, D. P., & Maramis, J. B. (2022). Transformasi digital: Peran kepemimpinan digital. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 10(2). <https://doi.org/10.35794/emba.v10i2.41399>
- Veranita, M., Purwadhi, P., Aziz, F. A., Nurwansyah, A., Anggreyorina, A., Aziz, M. A., & Fitaloka, N. D. (2024). Analisis efektifitas kepemimpinan transformasional dalam penetapan kebijakan organisasi di

era digital. *Journal of Governance and Public Administration*, 1(2), 179-186. <https://doi.org/10.59407/jogapa.v1i2.592>

Wujarso, R., Pitoyo, B. S., & Prakoso, R. (2023). Peran kepemimpinan digital dalam era digital. *Journal of Information System, Applied, Management, Accounting and Research*, 7(1), 1. <https://doi.org/10.52362/jisamar.v7i1.720>

Yahya, T. E. N. (2025, September). Analisis Penerapan Kepemimpinan Strategik di Era Digital, Studi Kasus: Desa Kembangbelor, Mojokerto. In *Seminar Nasional Best Practice Mobilitas Mahasiswa* (Vol. 2, No. 1, pp. 1-9).

Yaminah, D., Rukmana, A., Mariyam, L., Armila, N., Mujahidin, M., & Khaerul, K. (2023). Kepemimpinan kepala sekolah Islam di era transformasi digital. *Jurnal Syntax Admiration*, 4(1), 47–59. <https://doi.org/10.46799/jsa.v4i1.520>

Yayuk Zulaikah, Patoni, A., & Maunah, B. (2024). Implementasi kepemimpinan transformational pada lembaga pendidikan Islam. *Jurnal Nakula: Pusat Ilmu Pendidikan, Bahasa dan Ilmu Sosial*, 2(3), 113–132. <https://doi.org/10.61132/nakula.v2i3.766>

Yeremia Niaga Atlantika, Sabinus Beni, E. M. S. (2026). Analisis Gaya Kepemimpinan Pada Praktik Studi Kelayakan Bisnis Dalam Era Ekonomi Digital di Daerah Perbatasan. 13(September 2024), 2026–2043. <https://doi.org/10.34127/jrlab.v13i3.1257>

Zebua, D. S., Sarumaha, A., Waruwu, A. J., Zai, M., Lase, C. E. T., Harefa, Y. B., & Halawa, F.. (2025). Analisis Gaya Kepemimpinan Visioner Dan Demokratis Pada Era Digital. *Jurnal Dinamika Manajemen*, 12(03), 99–109. <https://doi.org/10.22437/jdm.v12i03.35198>