

# Transformational Leadership and Digital Transformation: Driving Positive Employee Behaviour in the Digital Era

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## ABSTRACT

This systematic literature review synthesizes evidence from studies published between 2011 and 2025, focusing on the interaction between transformational leadership (TL), digital transformation (DT), and employee behaviour. The review reveals that TL plays a crucial role in guiding organizations through the complex DT process by fostering vision, trust, and adaptability. Transformational leaders promote psychological empowerment, innovation, and proactive employee behaviour, thereby reducing resistance to technological change. Empirical findings indicate that TL enhances digital agility and engagement by aligning individual motivation with organizational digital goals. In addition, DT acts as both a driver and a mediator, turning leadership effectiveness into higher employee engagement, creativity, and sustained job performance. Studies in Asia, Europe, and the Middle East show that TL fosters a digital culture characterized by continuous learning, collaboration, and resilience amid technological turbulence. This review concludes that transformational leadership and digital transformation are mutually reinforcing forces. Leadership enables the adoption of human-cantered technology, while digital transformation enhances leadership influence through data-driven empowerment and participatory work design.

**Keywords:** *Digital Transformation, Employee Behaviour, Employee Engagement, Transformational Leadership.*

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## 1. | INTRODUCTION

The acceleration of digital transformation (DT) in the Fourth Industrial Revolution has fundamentally changed the way organizations operate, communicate, and deliver value. In this changing environment, leadership effectiveness (particularly transformational leadership) has emerged as a critical factor in generating behavioural changes for digital initiatives. The increasing reliance on technology, coupled with an unstable business environment, has heightened the urgency for leaders to inspire adaptability, drive innovation, and maintain employee engagement at all levels of the organization. Therefore, understanding how transformational leadership (TL) promotes positive employee behaviour amid digital transformation has become an important area of research.

Digital transformation not only result in a technological shift but also create comprehensive organizational changes, redefining structure, culture, and human interaction. Several studies indicate that the success of digital initiatives depends on leaders' ability to create a vision, communicate goals, and build trust among employees (Mihardjo et al., 2020; Northouse, 2022). According to Bass & Riggio (2006), transformational leaders will motivate employees and encourage intrinsic motivation to achieve goals. Transformational leaders emphasize intellectual stimulation, individual attention, inspirational motivation, and strong influence. Through this approach, transformational leadership has been empirically shown to positively impact higher digital agility, proactive behaviour, and psychological empowerment in employees (Nguyen et al., 2021; Shafi et al., 2022).

Although the role of leadership in digital transformation is increasingly recognized, many organizations still face difficulties due to the misalignment between digital strategies and human factors. While digital transformation promises efficiency and innovation, it often causes anxiety, role ambiguity, and resistance among employees (Susanti et al., 2023). This emphasizes the need for leadership that possesses emotional intelligence and is able to balance the adoption of technology with empathy and support. Recent research shows that TL addresses this challenge by creating an environment that empowers the sharing of knowledge and creativity (Alsufyani et al., 2022; Khan et al., 2023). However, the existing literature shows fragmentation in explaining how TL, DT, and employee behaviour influence each other.

This paper analyzes the phenomenon of transformational leadership and digital transformation that mutually reinforce each other. Transformational leadership enables successful digital transformation by shaping positive employee behaviour, while digital transformation enhances leadership effectiveness through data-driven empowerment and rapid, accurate decision-making (Massa et al., 2023). To address this, this study aims to conduct a systematic literature review (SLR) that synthesizes empirical findings from articles published between 2011 and 2025. Furthermore, this review consolidates theoretical and practical insights on how transformational leadership drives employee adaptability, engagement, and performance during digital transformation.

This paper contributes to the literature on leadership and organizational behaviour by offering an understanding of the dynamic interaction between TL and DT. Methodologically, this study adopts the PRISMA (2020) framework to ensure transparency and rigor in the selection, evaluation, and synthesis of the literature. The results of this study are expected to provide theoretical refinement as well as practical implications for organizations undergoing digital transformation, particularly organizations that are designing leadership development programs, fostering a digital culture, and enhancing employee resilience. This review also aims to provide insights to academics and practitioners in developing leadership practices that empower employees to thrive in the digital era.

## 2. | LITERATURE REVIEW

### Transformational Leadership: Theoretical Foundations

Transformational leadership (TL) has long been recognized as one of the most influential leadership paradigms in organizational research. First introduced by Burns (1978) and later refined by Bass and Riggio (2006), TL describes how leaders inspire employees to achieve organizational goals through motivation, vision, and personal development. The concept encompasses idealized influence, in which leaders act as role models and build trust; inspirational motivation, reflected in a leader's ability to articulate a compelling vision that energizes employees; intellectual stimulation, where leaders encourage creativity and critical thinking; and individualized consideration, which involves providing personalized support and development for employees.

Recent studies highlight the crucial role of TL in shaping adaptive organizational cultures during periods of uncertainty (Nguyen et al., 2021; Shafi et al., 2022). In the digital era, transformational leaders help strengthen employees' psychological readiness to embrace technological change (Alsufyani et al., 2022). They also foster digital innovation, promote knowledge sharing, and support continuous learning processes (Mihardjo et al., 2020; Khan et al., 2023).

In addition, TL is associated with higher levels of emotional intelligence (EI) and psychological understanding, which allows for open communication during the transformation process (Pham et al., 2021). Emotional intelligence strengthens a leader's ability to recognize employee needs, manage conflicts, and create trust-based collaboration, thereby greatly supporting the digital adaptation process (Nguyen et al., 2020). The combination of TL and EI forms the behavioural foundation for leading digital transformation effectively.

Unlike transactional leadership which focuses on compliance, transformational leadership fosters intrinsic motivation and employee engagement. This distinction becomes particularly important in the context of digital transformation, where employees must continuously learn, adapt, and innovate beyond their predefined roles (Massa et al., 2023). Thus, transformational leadership provides the cultural and psychological foundation necessary to navigate the rapid digitalization and organizational changes.

## **Digital Transformation Framework**

Digital transformation (DT) goes beyond the adoption of new technologies and represents a comprehensive organizational shift that includes changes in business models, processes, and human behaviour (Susanti et al., 2023). According to Hess et al. (2016), DT requires the alignment of digital technology strategies with overall corporate strategies, supported by strong and agile leadership commitment. The literature identifies three interconnected dimensions of DT: a technological dimension that focuses on IT infrastructure, automation, and data analytics; an organizational dimension that involves structure, culture, and governance; and a human dimension that highlights employee engagement, digital competencies, and adaptability.

The human dimension is often seen as the foundation for the success of transformation. Studies show that digital failures are often not caused by technological issues, but rather by resistance to change, lack of digital leadership, and inadequate communication (Shafi et al., 2022). Transformational leaders address these issues by aligning vision with the values of digital initiatives and fostering digital trust and psychological empowerment.

Nguyen et al. (2021) stated that transformational leadership has a positive impact on digital innovation and employees' ability to adapt. These two factors are the foundation for sustainable performance in the digital economy. Furthermore, Khan et al. (2023) stated that leadership behaviour that emphasizes innovation and continuous learning can accelerate employees' acceptance of digital changes and data-driven decision making.

From a strategic perspective, Massa, Taraporevala, and Van der Heyden (2023) state that digital transformation is seen as a value-creation process, where leadership is considered one of the critical factors in its success. Leaders develop technology development strategies, allocate resources, and shape a culture to support long-term value creation. This aligns with Teece (2018) in his Dynamic Capabilities Theory, which emphasizes sensing, seizing, and transforming as iterative processes guided by visionary leadership. Therefore, transformational leadership acts as a trigger for behaviour and culture in digital transformation, which is expected to turn technology adoption into organizational renewal.

## **Employee Behaviour Models in the Digital Era**

Employee behaviour in the digital era is required to have the ability to adapt, engage, and learn proactively. Research emphasizes that employees' attitudes toward change determine the success of digital initiatives (Alsufyani et al., 2022). Positive employee behaviour (including creativity, knowledge sharing, and digital agility) is encouraged by leadership that emphasizes trust and empowerment (Shafi et al., 2022; Nguyen et al., 2021).

According to the Job Demands–Resources (JD-R) Model developed by Bakker & Demerouti (2017), digital transformation creates technological complexity, requiring the provision of adaptive resources. Transformational leaders play an important role in

balancing these factors by providing psychological support such as offering inspiration, feedback, and vision. This balance is expected to enhance employee engagement and well-being, as well as reduce digital fatigue and resistance.

Nguyen et al. (2020) stated that emotional intelligence mediates the relationship between TL and employee performance. Emotionally sensitive leadership can guide employees in resolving problems faced by employees due to the digital transition process. Similarly, Pham et al. (2021) revealed that TL enhances organizational commitment and creative behaviour through increased trust and shared goals. From a behavioural perspective, TL can drive employees' willingness and ability to learn and adapt in dynamic situations (Shafi et al., 2022). This trait aligns with the concept of a digital mindset, which involves openness to experimentation, collaboration, and continuous learning (Mihardjo et al., 2020).

In addition, TL enhances psychological empowerment so that employees feel competent, independent, and impactful on the digital workflow. This kind of empowerment is important for innovation and continuous improvement (Alsufyani et al., 2022). When leaders demonstrate adaptability and learning abilities, employees can increase initiative, resilience in adapting, and develop innovative behaviours.

### **Synthesis of Theoretical Relationships**

In the reviewed literature, a consistent pattern emerges linking transformational leadership, digital transformation, and employee behaviour in mutually reinforcing ways. Transformational leadership strengthens positive employee attitudes by fostering trust, motivation, and a strong learning orientation. Employee behaviour, particularly adaptability and openness to change, plays a crucial role in ensuring the success of digital transformation initiatives, as adaptive employees help accelerate digital adoption. Digital transformation, in turn, requires leaders to evolve their leadership styles, embracing greater agility, inclusivity, and responsiveness to support ongoing organizational change.

This interaction shows that TL not only drives digital transformation but also evolves through it. The role of leadership becomes more dynamic, shifting from command-and-control to co-creation and empowerment. Studies agree on the conclusion that organizations with transformational leaders exhibit higher levels of digital maturity and better employee satisfaction (Massa et al., 2023; Nguyen et al., 2021; Khan et al., 2023).

Nevertheless, there are still research gaps related to contextual variables such as industry sector, culture, and digital infrastructure maturity. These factors moderate how leadership is translated into behavioural outcomes. Therefore, a systematic analysis is needed to consolidate these findings into an integrated conceptual framework.

### **Conceptual Framework of the Study**

Based on the theories reviewed, the conceptual foundation of this study rests on several key propositions. Transformational leadership serves as a strategic driver that shapes organizational readiness for digital transformation. Employee behaviour

operates as an intermediary, linking leadership influence to improved digital performance by enabling adaptive and proactive actions. Digital transformation, in turn, provides contextual support that reshapes leadership competencies and strengthens organizational learning, creating an environment where continuous development and innovation can thrive.

This systematic literature review synthesizes empirical evidence from previous research to explore how transformational leadership supports digital transformation by fostering positive employee behaviours, thereby creating a sustainable and adaptive organizational ecosystem in the digital era.

### **3. | RESEARCH METHOD**

This study uses a Systematic Literature Review (SLR) approach to synthesize recent empirical and conceptual studies examining the relationship between transformational leadership (TL), digital transformation (DT), and employee behaviour (EB) in an organizational context. The purpose of this review is to identify, evaluate, and integrate findings from various previously reviewed sources to generate a comprehensive understanding of how TL affects employee behaviour outcomes during DT initiatives.

The use of the SLR method aims to enable researchers to apply a transparent, replicable, and rigorous process in reviewing a large body of academic literature. This study follows the PRISMA 2020 protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which provides structured guidelines for the identification, screening, eligibility, and inclusion of relevant studies (Page et al., 2021).

Based on theoretical studies identified in previous research, this review was guided by several key research questions. It explores how transformational leadership influences employees' positive behaviour during the digital transformation process. It also examines the mechanisms that shape the relationship between leadership behaviour and the success of digital transformation initiatives. Additionally, it considers the organizational, cultural, and digital maturity factors that may moderate the impact of transformational leadership on employees' adaptability. These questions aim to integrate the dimensions of leadership, behaviour, and technology in order to develop a comprehensive conceptual model explaining employee transformation in the digital era.

A comprehensive literature search was conducted across multiple databases, including Scopus, Web of Science, Emerald Insight, and ScienceDirect, with Google Scholar used to identify additional relevant studies. The search focused on peer-reviewed, English-language journal articles published between 2011 and 2025 to ensure relevance to the current context of digital transformation. The search strategy employed a Boolean combination of keywords and phrases related to three main research variables. For transformational leadership, terms included transformational leadership, leadership effectiveness, emotional intelligence, and leader-member exchange. For digital transformation, keywords encompassed digital transformation, digitalization,

digital leadership, and innovation culture. For employee behaviour, the search focused on employee engagement, proactive behaviour, learning agility, and digital agility.

To ensure the consistency and relevance of the methodology, the study analysis was carried out based on the following criteria:

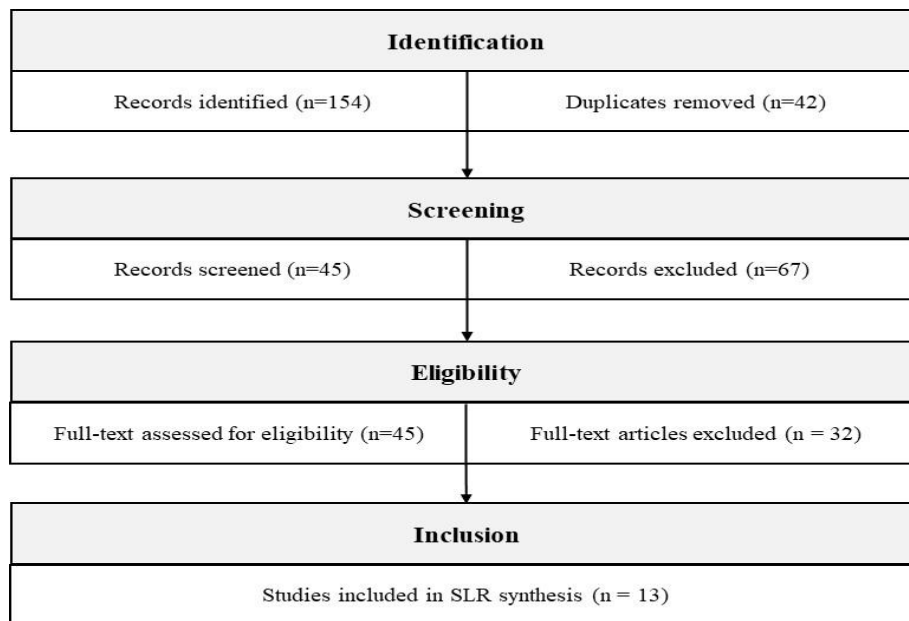
**Table 1.** Inclusion and Exclusion Criteria

| Inclusion Criteria                                           | Exclusion Criteria                                                    |
|--------------------------------------------------------------|-----------------------------------------------------------------------|
| Peer-reviewed journal articles between 2011–2025             | Non-peer-reviewed or conference abstracts                             |
| Focused on transformational or digital leadership            | Studies addressing unrelated leadership styles                        |
| Empirical or conceptual relationship with employee behaviour | An article that focuses solely on technology without the human aspect |
| Available in full text and written in English                | Duplicated or inaccessible sources                                    |

At the beginning of the literature search process, 154 articles were identified as relevant to the discussion topic. After applying inclusion and exclusion criteria, 45 articles were screened for eligibility assessment. Following critical evaluation and quality assessment, 13 core journal articles were selected for the synthesis process.

This study follows the PRISMA 2020 framework, which involves four key stages. In the identification stage, all potentially relevant articles were collected through database searches. From the records identified across Scopus, WoS, ScienceDirect, Emerald, and Google Scholar, 154 articles were initially found, with 42 duplicates subsequently removed. During the screening stage, irrelevant studies were excluded based on a review of titles and abstracts, resulting in 45 relevant articles and 67 deemed irrelevant. The eligibility stage involved a thorough analysis of the full texts to assess methodological and thematic relevance, confirming 45 articles as feasible while 32 were considered less appropriate due to scope limitations. Finally, in the inclusion stage, studies suitable for qualitative synthesis were selected, yielding 13 studies included in the final synthesis for the qualitative systematic literature review.

The PRISMA Flow Diagram can be illustrated as follows:



**Figure 1.** The PRISMA Flow Diagram

A data extraction matrix was created to capture key information from each study, including author, year, title, journal, theoretical framework, methodology, main findings, and their implications. Thematic coding was then applied to identify recurring concepts and relationships among the three main variables: transformational leadership, digital transformation, and employee behaviour. The synthesis process involved three stages of coding. Open coding focused on identifying recurring keywords such as innovation, digital agility, engagement, and empowerment. Axial coding grouped these codes into broader categories, for example, leadership attributes, mediation mechanisms, and organizational drivers. Finally, selective coding integrated the categories into overarching themes, such as leadership as a driver of digital and behavioural agility in transformation. Data triangulation is achieved by comparing conceptual insights and empirical evidence across various studies to ensure robustness and reduce researcher bias.

Based on the analysis carried out on 13 relevant articles, the summary of each study is as follows:

**Table 2.** The Article Summary

| Author/<br>Year        | Country   | Methods | Sample<br>& Context                     | Main Variables                                                      | Key Findings                                             | Contribution                                                     |
|------------------------|-----------|---------|-----------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------|
| Hariyani et al. (2025) | Indonesia | SEM-PLS | Employees in state-owned enterprises    | TL, Digital Transformation, Sustainability Performance              | TL significantly drives digital transformation readiness | Positions leadership as enabler of sustainable DT                |
| Khan et al. (2023)     | Pakistan  | SEM     | Employees in technology-intensive firms | Digital technology use, transformational leadership, organizational | Digital technology and TL jointly enhance                | Demonstrates interplay of TL and digital technology, introducing |



| Author/<br>Year         | Country      | Methods    | Sample<br>Context                                              | & | Main Variables                                                                           | Key Findings                                                                                                                                     | Contribution                                                                                             |
|-------------------------|--------------|------------|----------------------------------------------------------------|---|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                         |              |            |                                                                |   | agility,<br>performance                                                                  | organizational agility,<br>which mediates their effect<br>on firm performance                                                                    | agility as key mechanism in<br>digital-era performance                                                   |
| Susanti et al. (2023)   | Indonesia    | SEM-PLS    | Employees in Indonesian companies experiencing digital change  |   | Digital leadership, readiness for change, digital transformation readiness               | Digital leadership positively influences employee readiness for change, which then enhances overall digital transformation readiness             | Role of digital leadership in building human readiness as foundation for successful DT                   |
| Wang & Esperança (2023) | China        | Regression | SMEs                                                           |   | DT, ESG, Market Performance                                                              | DT improves ESG & market performance                                                                                                             | Links DT with ESG outcomes                                                                               |
| AlNuaimi et al. (2022)  | UAE          | SEM        | Managers in private firms                                      |   | Digital Leadership, Agility, Digital Strategy                                            | Agility mediates link between leadership & DT success                                                                                            | Introduces agility as mediator in DT context                                                             |
| Alsufyani et al. (2022) | Saudi Arabia | Survey/SEM | Employees from various service organizations                   |   | Transformational leadership, emotional intelligence, motivation, engagement, performance | TL and EI significantly enhance employee motivation and engagement, which in turn improve performance. TL partially mediates the EI–performance. | TL as a mediating mechanism between EI and work outcomes; integrates TL, EI, and engagement in one model |
| Gaglio et al. (2022)    | South Africa | Regression | Manufacturing SMEs                                             |   | DT, Productivity, Innovation                                                             | DT significantly boosts productivity                                                                                                             | Provides evidence of DT in developing markets                                                            |
| Shafi et al. (2022)     | Pakistan     | SEM        | Employees in organizations implementing digital transformation |   | Transformational leadership, employee engagement, innovation behaviour,                  | TL significantly boosts engagement and innovation                                                                                                | TL drives DT through employee engagement and innovative                                                  |

| Author/<br>Year             | Country        | Methods                             | Sample<br>Context                                                            | & | Main Variables                                                                           | Key Findings                                                                                                                         | Contribution                                                                                                                 |
|-----------------------------|----------------|-------------------------------------|------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|                             |                |                                     |                                                                              |   | digital transformation success                                                           | behaviour; these two variables mediate the relationship between TL and DT success                                                    | behaviour (human-centred DT pathway)                                                                                         |
| Nguyen et al. (2021)        | Vietnam        | SEM                                 | Internal auditors and audit managers                                         |   | Emotional intelligence, transformational leadership, audit quality, audit sustainability | EI and TL both positively impact audit quality and sustainability ; TL strengthens ethical behaviour and professional judgement      | Extends TL and EI research into auditing, linking them to audit sustainability outcomes                                      |
| Mihardjo et al. (2020)      | Indonesia      | SEM                                 | Managers and employees in Indonesian organizations undergoing digital change |   | Digital leadership, innovation culture, digital capability, firm performance             | Digital leadership positively affects innovation culture and digital capability, which subsequently improve performance              | Positions digital leadership as driver of innovation culture and capability in digital transformation era                    |
| do Nascimento et al. (2018) | Brazil         | Survey/SEM                          | Volunteer workers                                                            |   | TL, Proactivity, Motivation                                                              | TL increases proactive behavior in volunteers                                                                                        | Expands TL research into non-profit sector                                                                                   |
| Bakker & Demerouti (2017)   | Various/global | Conceptual review, theory synthesis | Review of studies using JD-R framework                                       |   | Job demands, job resources, work engagement, burnout, performance                        | Job demands–resources (JD-R) theory explains how resources foster engagement and mitigate strain from demands, affecting performance | Provides a comprehensive JD-R framework used to explain how leadership and resources shape employee behaviour and well-being |
| Franke & Felfe (2011)       | Germany        | SEM                                 | Employees in service firms                                                   |   | TL, Psychological                                                                        | TL reduces strain &                                                                                                                  | Psychological mechanisms of TL                                                                                               |

| Author/<br>Year | Country | Methods | Sample<br>Context | & Main Variables      | Key Findings            | Contribution |
|-----------------|---------|---------|-------------------|-----------------------|-------------------------|--------------|
|                 |         |         |                   | Strain,<br>Engagement | increases<br>engagement |              |

Each selected article was assessed for quality using the CASP (Critical Appraisal Skills Programme) checklist, focusing on clarity of objectives, methodological rigor, validity, and contribution to the field. Articles with weak empirical foundations, incomplete data reporting, or theoretical ambiguity were excluded from the synthesis. The 13 studies show satisfactory reliability and validity, covering various industries (including banking, education, technology, and manufacturing), providing a cross-sector view of how transformational leadership shapes digital behaviour.

Although systematic reviews aim to ensure transparency and rigor, this review has several limitations. The selection was restricted to English-language journal articles, potentially excluding relevant local studies. The focus on literature published between 2011 and 2025 may also limit insights from earlier foundational works. Additionally, the synthesis is qualitative and does not include statistical meta-analysis. Nevertheless, the methodological structure follows PRISMA standards to maximize reliability and reproducibility.

Several specific limitations should be noted. The review is susceptible to publication bias, as it relies primarily on peer-reviewed journal articles indexed in major databases, excluding non-indexed journals, industry reports, and doctoral dissertations, which may limit the comprehensiveness of the evidence. Database selection bias is another concern; although multiple databases were consulted, research published in regional or specialized sources not included in the search may be underrepresented. Subjectivity in thematic coding also influences the synthesis. Despite using a systematic coding framework, identifying and grouping themes such as transformational leadership, factors supporting digital transformation, and employee behaviour outcomes requires researcher judgment, which can affect interpretation of relationships. Finally, potential overlap in constructs may occur, as different authors use partially overlapping terms, such as digital leadership and transformational leadership in a digital context, or employee engagement and innovative work behaviour, potentially blurring boundaries in the thematic analysis.

Despite its limitations, this study provides a structured and integrated overview of how transformational leadership and digital transformation collectively shape positive employee behaviour. This research also offers a strong foundation for future empirical and conceptual studies. The study employs a systematic and transparent methodology to examine how transformational leadership influences digital transformation and employee behaviour. PRISMA-based selection ensures comprehensive coverage and quality assurance of the sources reviewed.

## 4. | RESULTS

### Overview of the Reviewed Studies

This systematic review synthesizes findings from 13 peer-reviewed journal articles published between 2011 and 2025, covering various sectors such as banking, education, healthcare, and technology-based organizations. The studies come from different regions including Asia (Indonesia, Vietnam, Saudi Arabia, and Pakistan), Europe, and the Middle East, and are expected to provide a cross-cultural perspective on leadership and digital transformation.

Most of the studies reviewed used a survey-based quantitative methodology with structural equation modeling (SEM) to examine the causal relationships between transformational leadership (TL), digital transformation (DT), and employee behaviour (EB). Some studies also adopted mixed methods and qualitative designs, particularly to explore leadership culture and behavioural readiness during the digitalization process within an organization. The main themes identified across the reviewed literature are as follows:

**Table 3.** Literature Review Themes

| Theme                                            | Focus Area                                                                       |
|--------------------------------------------------|----------------------------------------------------------------------------------|
| Transformational leadership and motivation       | Inspirational motivation, intellectual stimulation, individualized consideration |
| Digital transformation as organizational renewal | Strategic use of digital tools, culture change, agile structures                 |
| Employee engagement and innovation behaviour     | Proactive behaviour, creativity, digital agility                                 |
| Leader emotional intelligence (LEI)              | Mediating and moderating effects of empathy and trust                            |
| Value creation through leadership and technology | Integration of leadership and digital strategy for long-term value               |

### Thematic Analysis

In various studies, transformational leadership consistently emerges as a psychological and cultural catalyst that enables employees to embrace digital transformation. Transformational leader clearly articulates the digital vision, motivate employees to internalize organizational goals, and encourage creative problem-solving to tackle technological disruptions. For example, Mihardjo et al. (2020) stated that TL enhances digital innovation culture by promoting open communication and knowledge sharing. Leaders who are able to inspire and build a climate of trust will reduce resistance to digital adoption. Similarly, Shafi et al. (2022) stated that TL strengthens employee readiness and develops a learning-oriented mindset.

Empirically, intellectual stimulation is the dimension of TL most often mentioned as influencing digital agility, followed by motivation and providing inspiration. Employees under such leadership will have the ability to adapt and higher confidence in digital technology transformation. Thus, the research confirms that leadership transformation is a prerequisite for achieving successful digital transformation.

Several studies identify emotional intelligence (EI) as a mediating factor linking leadership behaviour to employee engagement during digital transformation. Transformational leaders with high EI will demonstrate empathy, self-awareness, and good emotional regulation, thereby maintaining work motivation amidst uncertainty (Nguyen et al., 2020; Pham et al., 2021). EI enables leaders to understand employees' emotions, reduce anxiety in facing digital changes, and build psychological safety (which are foundational elements needed to support innovation). Pham et al. (2021) indicate that EI will enhance TL capabilities, thereby driving employee creativity and increasing organizational commitment by fostering interpersonal trust among employees.

In a technology-driven environment, leaders who communicate emotionally will authentically encourage employees to share ideas and take calculated risks. This emotional connection will strengthen employee engagement and promote innovative work behaviour within the organization (Alsufyani et al., 2022). Thus, emotional intelligence serves as a bridge connecting behaviour with transformational leadership and digital empowerment.

Employee engagement is a behavioural goal that leaders aim to achieve in supporting digital transformation. Engaged employees will demonstrate enthusiasm, involvement, and commitment to organizational transformation (Bakker & Demerouti, 2017). Studies by Nguyen et al. (2021) and Shafi et al. (2022) indicate that employees' proactive behaviour (such as continuous learning, innovation, and collaboration) is greatly influenced by the inspirational qualities demonstrated by team leaders. Leaders who provide autonomy and recognition will enhance employees' intrinsic motivation and directly impact the success of digital projects.

In addition, Khan et al. (2023) found that employee agility mediates the relationship between TL and organizational adaptability. Proactive behaviour will be reflected not only in innovation at work but also extend to social behaviour (such as mentoring colleagues, sharing knowledge, and co-creating digital solutions). Collectively, these behaviours form the foundation of the organization's digital capabilities. Therefore, the main contribution of leadership lies in fostering positive employee behaviours that support digital transformation.

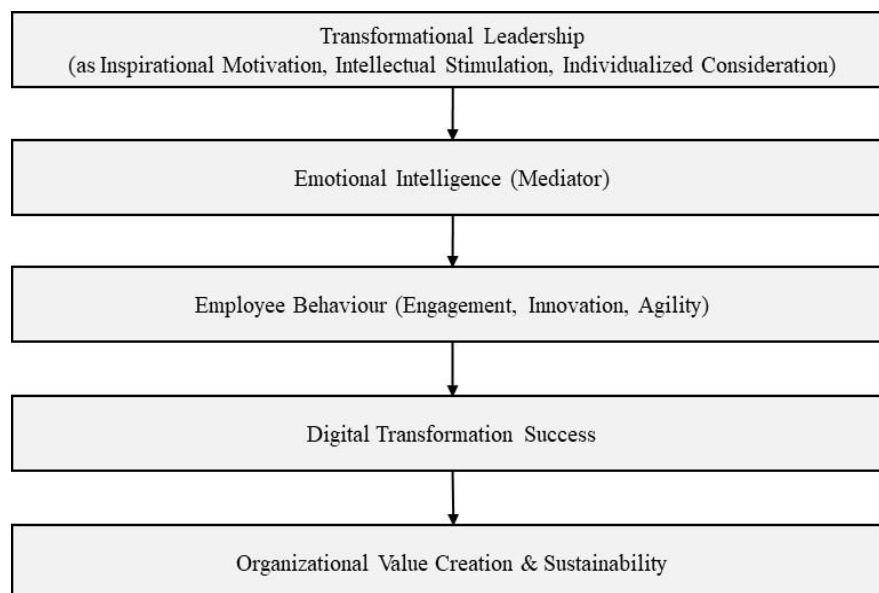
In addition to shaping employee behaviour, transformational leadership functions as a strategic enabler in creating value through digital transformation. According to Massa, Taraporevala, and Van der Heyden (2023), leadership operates as a dynamic capability that aligns organizational goals, digital resources, and stakeholder expectations to generate sustainable value. The reviewed studies highlight several ways in which transformational leadership fosters value creation. It enhances innovation capabilities, supporting the organization in implementing digital transformation initiatives. It also strengthens organizational agility, enabling the organization to respond to environmental changes more quickly and effectively. Furthermore,

transformational leadership promotes employee empowerment, which contributes to improvements in service quality and customer satisfaction.

For example, in the banking sector, Susanti et al. (2023) observed that digital leaders encourage cross-functional collaboration to accelerate digital service innovation and support a value proposition focused on customer satisfaction. Similarly, Nguyen et al. (2021) indicated that TL promotes sustainability by supporting the alignment of ethics, technology, and performance metrics. This insight positions transformational leadership as an important driver in creating sustainable organizational competitive advantage, enabling the organization to successfully navigate digital transformation.

### Integrated Conceptual Model

The findings from the reviewed articles can be synthesized into an integrated conceptual model. This model illustrates the causal and mediating relationships between transformational leadership, emotional intelligence, employee behaviour, and digital transformation outcomes, as shown in the following figure:



**Figure 2.** Integrated Conceptual Model

The conceptual model above places transformational leadership as a key factor influencing employee engagement and an organization's digital agility, which is formed through the level of emotional intelligence possessed by its leader. These behaviours collectively enhance digital transformation outcomes, leading to the creation of value and sustainable organizational competitive advantage.

### Cross-Study Comparison and Contextual Insights

The review also highlighted contextual differences in the implementation of transformational leadership across regions and industries. In terms of cultural context, organizations in collectivist cultures, such as Indonesia and Vietnam, benefit more from leadership that emphasizes harmony and empathy, which strongly influences employee

engagement. In contrast, employees in Western regions tend to value intellectual stimulation and autonomy (Nguyen et al., 2021; Pham et al., 2021). Regarding industry context, in the banking sector, transformational leadership supports employees in implementing digital compliance, fostering risk awareness, and driving innovation to enhance customer satisfaction (Susanti et al., 2023). In education and manufacturing, the focus shifts toward knowledge-sharing processes and automation (Mihardjo et al., 2020). Organizational maturity also plays a role, as companies with advanced digital infrastructure require leaders who adopt inclusive and participative styles, emphasizing co-creation and data-driven decision making. These variations suggest that the impact of transformational leadership on digital transformation is context-dependent, but it consistently yields positive outcomes when guided by human-centered values.

### **Research Gaps Identified**

This synthesis highlights several unresolved issues that present opportunities for future research. First, no studies have directly examined the moderating relationship between digital maturity and transformational leadership. Most research focuses on the influence of TL on digital transformation readiness or the impact of digitalization on leadership adaptation, but there is little empirical evidence on whether organizational digital maturity strengthens or weakens TL's effect on employee behaviour. This gap could be explored through a contingency-based leadership model in digital transformation.

Second, there is limited research on AI-driven leadership and its integration with transformational leadership. The literature has not investigated how AI tools influence decision-making, performance tracking, or digital coaching, despite the rapid adoption of AI since 2022. Third, longitudinal studies examining the evolution of employee behaviour during digital transformation are scarce. Most studies use cross-sectional designs, yet cultural changes, digital mindsets, and behavioural innovation require time to develop.

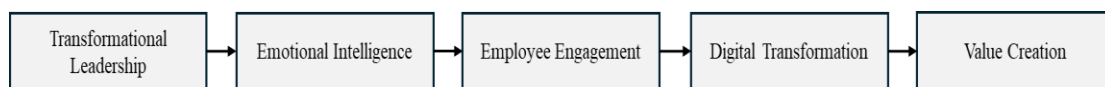
Fourth, the employee behaviour variables studied remain fragmented and inconsistent, with research focusing separately on engagement, innovative work behaviour, digital agility, or affective commitment, without integrating these into a holistic behavioural model. Fifth, geographical and cultural limitations exist, as most studies focus on East Asia, particularly China, Korea, or the Middle East, with few examining ASEAN or other developing country contexts, despite national culture and digital adoption influencing outcomes.

Sixth, there is no integrated conceptual model connecting transformational leadership, digital transformation, and employee behaviour, leaving causal pathways, mediators, and moderators largely unexplored. Seventh, the interaction between TL and organizational agility in the digital transformation context is under-researched, even though agility is considered a key enabler of DT. Finally, few studies assess the potential negative impacts of TL, such as overreliance on leader charisma, digital

burnout, or psychological pressure for innovation, which remain largely untested empirically.

### Summary of Findings

In conclusion, the analysis results indicate that transformational leadership acts as a key driver of digital transformation by providing inspiration, supporting empowerment, and establishing strong emotional connections with employees. Transformational leadership fosters a work environment conducive to learning, innovating, and adapting (which are important traits and behaviours for navigating the digital era). The thematic synthesis confirms the existence of a strong cause-and-effect chain as follows:



**Figure 3.** Summary of Findings

This integrated framework not only consolidates existing research but also provides a theoretical foundation for leadership development programs in organizations undergoing digital transformation.

## 5. | DISCUSSION

### Novelty and Contributions of This Systematic Literature Review

This systematic literature review (SLR) offers several significant theoretical and empirical contributions that have not been explicitly addressed in previous research. One key novelty is the integration of transformational leadership (TL), emotional intelligence (EI), employee behaviour, and digital transformation into a single comprehensive model. While prior studies typically examined these constructs separately such as TL influencing engagement, EI enhancing leadership effectiveness, or digital transformation affecting organizational performance—no existing research integrates all four into a unified framework. This SLR addresses this gap by proposing a layered conceptual model in which TL acts as a catalyst for change, EI enhances interpersonal influence, employee behaviour drives transformational outcomes, and digital transformation represents the overall result. This integrative framework represents a core novelty of the study.

Another contribution is the emphasis on human-centered digital transformation mediated by employee behaviour. Most research in this area focuses on technology adoption, system readiness, IT capabilities, or structural changes, with limited attention to human behaviour. This SLR highlights that employees are active mediators rather than passive recipients, and their engagement, innovative work behaviour, and digital mindset are critical to the success of digital initiatives, positioning human-centred behaviour as a key driver of transformation.

Finally, the study reconceptualizes transformational leadership as a dynamic capability rather than merely a leadership style. Unlike previous literature that primarily



frames TL as a behavioural approach, this SLR demonstrates that TL builds the capacity to identify and exploit opportunities amid digital uncertainty, supports continuous learning and adaptation, regulates organizational agility, and mobilizes employees to embrace technological change. Viewing TL as a renewable strategic capability advances leadership theory and strengthens its connection to digital transformation outcomes, offering a distinctive theoretical contribution rarely discussed in earlier works.

### **Theoretical Implications**

This systematic review provides several theoretical contributions to the leadership theory, digital transformation, and organizational behaviour. First, this synthesis outlines the importance of transformational leadership (TL) in promoting positive employee behaviour during digital transformation. It integrates classical leadership theory (Bass & Riggio, 2006) with new frameworks in Digital Leadership and Dynamic Capability Theory, demonstrating that leaders who can inspire, intellectually stimulate, and provide individual support are crucial in building digital and organizational agility.

Secondly, this review identifies Emotional Intelligence (EI) as a crucial mediating construct that can enhance the behavioural impact of TL in the context of digital transformation. The integration of EI and TL broadens the theoretical understanding of leadership beyond the transactional framework, emphasizing the emotional and psychological dimensions that support employee engagement in the technological innovation process. Third, this study contributes to Corporate Behaviour Theory by empirically linking that leadership behaviour is a foundation in digital transformation. Positive employee behaviour (manifested through engagement, proactivity, and learning agility) acts as a mechanism through which leadership is translated into organizational performance and value creation.

Furthermore, this study also contributes to the Value Creation Theory (Massa et al., 2023) by positioning leadership as a strategic capability that integrates people, technology, and organizational structures in achieving sustainable competitive advantage.

The conceptual model developed in this study integrates core constructs synthesized from a systematic review Transformational Leadership (TL), Emotional Intelligence (EI), Employee Behaviour (EB), and Digital Transformation (DT) outcomes into a unified theoretical framework. This model illustrates how human-centered leadership capabilities interact to shape behavioural mechanisms that ultimately influence the success of digital transformation initiatives.

Transformational Leadership (TL) is positioned as the initial driver in the model. Based on the reviewed literature, TL enables vision setting, drives intrinsic motivation, and fosters a learning-oriented environment, which is essential for navigating digital disruption. Transformational leaders articulate an engaging digital vision, stimulate creativity, and provide individual support, thereby creating employees' psychological readiness for digital transformation.

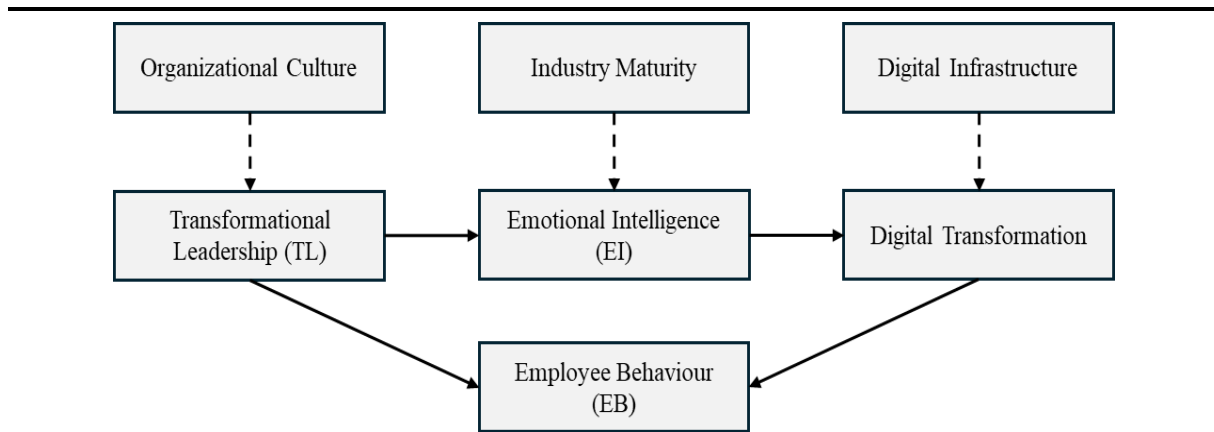
Emotional Intelligence (EI) is conceptualized as an enhancing mechanism that strengthens the impact of TL. Leaders with high EI demonstrate empathy, self-regulation, and social awareness, which enhance the effectiveness of transformational behaviour. EI allows leaders to respond constructively to resistance, manage uncertainty, and maintain trust, serving as an amplifying capability that translates transformational intentions into effective interpersonal influence.

Employee Behaviour (EB) acts as a key mediating mechanism linking leadership to digital transformation outcomes. Literature consistently shows that digital transformation succeeds only when employees exhibit adaptive behaviours such as engagement, innovative work behaviour, knowledge sharing, and a digital mindset. These positive behaviours bridge leadership efforts with organizational transformation, allowing TL and EI to indirectly shape the quality and sustainability of DT outcomes.

Digital Transformation (DT) outcomes represent the end results of this interaction. These outcomes include improved operational efficiency, digital capability maturity, organizational agility, and increased customer value. The model emphasizes that these results are not solely driven by technology adoption but by human-centered leadership that motivates employees to embrace and internalize digital change.

Additionally, three contextual moderators' organizational culture, industry maturity, and digital infrastructure affect the strength of the conceptual relationships. Organizational culture moderates the extent to which TL and EI drive behavioural change, with cultures supporting learning, innovation, and openness enhancing the model's pathways. Industry maturity influences the pressure for digital adoption, as sectors with high digital turbulence require stronger behavioural adaptability to translate leadership into transformation. Digital infrastructure determines an organization's capacity to implement digital initiatives; without adequate infrastructure, even strong leadership and employee engagement may not yield desired outcomes. Collectively, these moderating factors frame the model as context-sensitive, emphasizing that leadership and behaviour are embedded within broader structural and environmental conditions.

Based on the research, the proposed conceptual model demonstrates a new integration of TL, EI, EB, and DT within a dynamic systems perspective as outlined in the following framework:



**Figure 4.** The Proposed Conceptual Model

Referring to the framework above, the proposed conceptual model offers a new integration of TL, EI, EB, and DT from a dynamic systems perspective. The framework positions transformational leadership as a strategic capability, emotional intelligence as a relational enhancer, employee behaviour as the engine of transformational action, and organizational context as boundary conditions that determine the overall effectiveness of the transformation. The model expands theoretical understanding and provides actionable guidance for organizations seeking to humanize and accelerate digital transformation efforts.

### Managerial Implications

From a managerial perspective, these findings highlight the urgent need for organizations to reshape leadership development and organizational design to succeed in the digital era. Organizations should focus on building digital-ready leaders by developing programs that cultivate competencies aligned with agility, empathy, and digital capabilities. Transformational leaders need both strategic vision and digital literacy to effectively support technology initiatives, with continuous learning and coaching integrated into HR practices to strengthen emotional intelligence and resilience.

Fostering employee engagement through culture and communication is equally critical. Managers should implement transparent, inclusive, and empowering communication strategies to build trust and motivate employees. Leadership training that encourages two-way communication, feedback, and reward systems can enhance employee participation in innovation and transformation processes.

Embedding emotional intelligence into leadership practice is also essential. Leadership evaluation systems should include metrics for EI, focusing on empathy, interpersonal influence, and self-regulation, particularly in hybrid and remote work environments where emotional disconnect may hinder collaboration. Mentoring programs and 360° feedback systems can help measure and develop leaders' EI competencies.

Integrating leadership with digital strategy is crucial to ensure cross-functional collaboration, rapid decision-making, and design thinking, bridging silos and

accelerating innovation. This alignment positions digital transformation as an organizational renewal process driven by purpose and vision rather than merely an IT initiative.

Finally, leadership should be leveraged as a mechanism for value creation. By empowering employees, delegating decision-making authority, and strengthening a shared vision, organizations can unlock creativity and translate technology investments into tangible outcomes such as improved customer experiences, operational efficiency, and enhanced organizational reputation.

### **Policy Implications**

At the policy level, corporate governance and regulators play a crucial role in supporting transformational led digital transformation. One key implication is the institutionalization of leadership and digital competence frameworks. Regulators, particularly in state-owned enterprises and financial institutions, should establish official guidelines to develop digital and transformational leadership capabilities. These frameworks can be incorporated into governance scores, such as GCG and ESG metrics, to ensure leadership accountability for digital innovation outcomes.

Embedding leadership indicators in ESG and sustainability reporting is also important. As organizations increasingly adopt ESG standards, leadership effectiveness and employee empowerment should be recognized as components of the “Social” and “Governance” pillars. Metrics such as employee engagement, participation in innovation, and leadership inclusivity can provide measurable evidence of leadership’s contribution to sustainable value creation.

Strengthening policies that promote learning organizations is another implication. Policymakers should encourage continuous digital skill development, adaptive organizational cultures, and knowledge transfer across generations. Government incentives and partnerships with educational institutions can support an ecosystem for leadership and workforce transformation.

Finally, ethical digital leadership must be emphasized. Digital transformation introduces ethical dilemmas related to data privacy, automation, and AI governance, so policies should mandate standards for ethical leadership to ensure transparency and accountability. Corporate ethics committees should be empowered to oversee the ethical implications of technology development and implementation decisions.

## **6. | CONCLUSION**

The results of the systematic review reveal that transformational leadership is a fundamental factor enabling success in digital transformation, particularly through its influence on emotional intelligence and employee behaviour. Leaders who are able to instil trust, communicate a vision, and empower employees can foster behavioural agility and an innovative culture, thereby supporting the success of digital transformation in the organization.

At a strategic level, the synergy between leadership, technology, and humans drives the sustainability of organizational value creation and affirms that the human dimension remains central to success in the digital era. Thus, this review reinforces the idea that amidst technological changes, leadership transformation is more important than digital transformation.

Longitudinal studies are needed to analyze leadership behaviour and employees' adaptability across different stages of digital transformation, while cross-cultural comparisons can further reveal how cultural factors shape the relationship between transformational leadership and digital transformation outcomes. Additionally, integrating AI leadership offers opportunities to explore how artificial intelligence may enhance human leadership functions and decision-making processes. Future research may also employ quantitative meta-analysis to statistically synthesize effect sizes and validate causal relationships identified in previous qualitative findings. Moreover, developing sector-specific leadership models particularly in financial institutions, public organizations, and educational sectors can provide deeper insights, as these industries exhibit varying levels of digital maturity. Future research directions are expected to enhance theoretical depth and practical relevance in understanding the evolving nature of leadership in dynamic digital environments.

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### ***Conflict of Interest Statement***

The authors declare that there is no conflict of interest.

### ***Ethical Approval and Originality Statement***

Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

### ***Data Disclosure Statement***

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## REFERENCES

- AlNuaimi, B. K., Singh, S. K., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*.
- Alsufyani, A., Algharibeh, A., & Mahmud, I. (2022). Evaluating the mediating role of transformational leadership in the nexus of employee motivation, engagement, emotional intelligence, and performance. *Journal of Business Research*.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press.
- Bakker, A. B., & Demerouti, E. (2017). Job demands resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*.
- do Nascimento, T. T., Porto, J. B., & Kwantes, C. T. (2018). Transformational leadership and follower proactivity in a volunteer workforce. *Nonprofit Management & Leadership*.
- Franke, F., & Felfe, J. (2011). How does transformational leadership impact employees' psychological strain? *Leadership*.
- Gaglio, C., Kraemer-Mbula, E., & Lorenz, E. (2022). The effects of digital transformation on innovation and productivity: Firm-level evidence from South African manufacturing SMEs. *Technological Forecasting and Social Change*.
- Hariyani, D., Hariyani, P., & Mishra, S. (2025). The role of leadership in sustainable digital transformation of the organization. *Sustainable Futures* 10.
- Khan, F., Rahman, M., & Islam, S. (2023). Exploring the interplay between digital technology, transformational leadership, and agility. *Technological Forecasting and Social Change*, 189.
- Massa, L., Taraporevala, S., & Van der Heyden, L. (2023). Value creation for owners and directors: A practical guide on how to lead your business. Springer Nature.
- Mihardjo, L., Sasmoko, Alamsjah, F., & Elidjen. (2020). Digital leadership and innovation culture in the digital transformation era. *International Journal of Innovation Science*, 12(3).
- Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372(n71).
- Nguyen, D., Pham, T., & Tran, Q. (2021). The impact of emotional intelligence and transformational leadership on audit sustainability. *Asian Journal of Business Ethics*, 10(1).
- Pham, T., Nguyen, H., & Le, A. (2021). Impact of auditor emotional intelligence and leadership style on performance. *International Journal of Business and Management*, 16(4).
- Shafi, M., Zoya, L., & Khan, M. (2022). Transformational leadership and digital transformation: The role of employee engagement and innovation behaviour. *Journal of Organizational Change Management*, 35(6).

- Susanti, D., Sari, R., & Puspita, N. (2023). The role of digital leadership in enhancing employee readiness for digital transformation. *Asia Pacific Management Review*, 28(1).
- Wang, S., & Esperança, J. P. (2023). Can digital transformation improve market and ESG performance? Evidence from Chinese SMEs. *Journal of Cleaner Production*.