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Innovational Transformational Leadership on the era Digital Post Pandemic Covid-19 in the hospitality industry: A Review

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ABSTRACT

The research aims to understand better leadership strategies that foster innovation, improve operational efficiency, and enhance employee adaptability during digital transformation initiatives. The study employs a qualitative approach, conducting a critical literature review of 30 academic sources focused on transformational leadership and digital transformation in the hospitality sector. This research presents a conceptual framework illustrating how transformational leadership drives successful digital transformation by fostering innovation and technological integration. The findings reveal that transformational leaders enhance employee adaptability, operational efficiency, and customer engagement, making digital transformation a core component of organizational resilience. However, the findings offer practical insights for leaders seeking to implement digital transformation strategies while navigating post-pandemic challenges, such as fostering a culture of innovation, investing in employee training, and leveraging digital tools for operational efficiency. This study provides a novel combination of transformational leadership and digital transformation concepts within the post-pandemic hospitality industry, filling a significant gap in the existing literature. It highlights the importance of leadership strategies integrating digital tools to foster innovation and resilience in the hospitality sector.

Keywords – **Hospitality, Digital Transformation, Transformational Leadership, Innovation, Post-Pandemic Recovery, Leadership Strategies**

INTRODUCTION

The hospitality industry has been one of the hardest-hit sectors by the COVID-19 pandemic. The pandemic forced the industry to change operations, business strategies, and human resource management significantly. Amid this crisis, many organizations within the hospitality sector began to recognize the importance of digital transformation as a critical strategy for survival and recovery. A digital transformation is no longer an option but an urgent necessity to enhance operational efficiency and meet the evolving needs of consumers, who increasingly rely on digital technologies for their hospitality experiences (Busulwa et al., 2022; Hai et al., 2021; Zhu & Zhang, 2021).

In this context, leadership plays a crucial role in ensuring the success of digital transformation within the hospitality industry. Transformational leadership, which encourages innovation and inspires employees to achieve their full potential, has proven to be an effective leadership style during crises. Transformational leaders can manage large-scale changes by articulating a clear vision and fostering employee engagement pursuing organizational goals (Fitriati & Marsanty, 2023; Vial, 2019). This leadership style not only focuses on efficiency but also integrates digital technology as part of the strategy to adapt to the challenges posed by the pandemic (AlNuaimi et al., 2022).

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The adoption of technologies such as virtual reality (VR), augmented reality (AR), and data-driven management systems has become a key factor in creating more personalized and innovative guest experiences in the digital era. These technologies enable the hospitality industry to offer services that are more accessible and efficient while simultaneously enhancing customer engagement (Mohanty et al., 2020; Omran et al., 2024). Furthermore, leaders in this industry must also manage the ongoing shifts in organizational identity caused by digitalization and globalization. This involves not only adapting to new technologies but also redefining the core values, mission, and culture of the organization to align with the digital era. Changes in organizational identity are critical for maintaining a competitive edge in an increasingly crowded market (Buhalis et al., 2023; Ponting, 2022).

In the post-pandemic digital era, leaders in the hospitality industry face the challenge of integrating digital technology into daily operations while ensuring that innovation remains a top priority. It is particularly evident in the importance of fostering innovative work behaviors among employees through solid leader-member relationships and the ability to promote continuous learning (Ahmed et al., 2024; Antonopoulou et al., 2021). Digital leadership plays a vital role in creating a work environment that supports innovation and transformation, mainly through a learning orientation that encourages employees to continuously adapt to new technologies (AlNuaimi et al., 2022; Lathabhavan & Kuppusamy, 2024).

While there has been extensive research on transformational leadership and the impact of digitalization, there remains a gap in the literature that examines explicitly how innovative transformational leadership can be applied in the context of digital transformation in the post-pandemic hospitality industry. Previous studies tend to focus on other sectors or only cover aspects of digitalization without emphasizing the role of leadership in guiding innovation and organizational resilience in the face of modern challenges (Filimonau & Naumova, 2020; Kansakar et al., 2019). Therefore, there still needs to be a greater understanding of how transformational leadership can facilitate sustainable digital adaptation in the hospitality industry.

The primary objective of this study is to identify how innovative transformational leadership can support and facilitate digital transformation within the post-pandemic hospitality industry. This research seeks to answer the critical question: How can innovative transformational leadership facilitate and support digital transformation in the hospitality industry after the pandemic

This study offers a unique contribution to the field by combining the concepts of transformational leadership and digitalization, which have not been thoroughly explored in the context of the post-pandemic hospitality industry. Additionally, it enriches the literature by focusing on how leader-member relationships (LMX) and learning orientation contribute to innovative behavior in a hospitality sector undergoing digital transformation. The study is also unique in providing new insights into relevant leadership strategies for facing the challenges of the digital era and leveraging opportunities arising from technological change. This unique approach promises to bring fresh perspectives and solutions to the challenges faced by the hospitality industry in the digital age.

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THEORITICAL REVIEW

A. Leadership in the Digital Era

Transformational leadership is increasingly recognized as a crucial leadership style in the digital era, especially in industries such as hospitality that are rapidly evolving due to technological advancements. Transformational leaders are known for their ability to inspire and motivate employees, guiding them through periods of significant change and uncertainty. In the context of digital transformation, this leadership style becomes even more critical as organizations face disruptions brought about by new technologies. The hospitality industry, in particular, has had to adapt to these changes, implementing advanced digital tools such as AI, big data, and cloud-based systems to enhance operational efficiency and customer experience (AlNuaimi et al., 2022).

Furthermore, transformational leadership promotes creating an environment that fosters creativity and innovation, essential for navigating the challenges of the digital era. Transformational leaders push adopting new technologies and cultivate a mindset of continuous learning among employees. In this context, continuous learning refers to the ongoing process of acquiring new knowledge and skills to adapt to the changing digital landscape. It becomes a cornerstone for building teams agile teams responsive to the rapidly changing landscape of the hospitality industry (Vial, 2019; Antonopoulou et al., 2021). Leaders with a clear digital strategy are better equipped to guide their organizations through the complexities of technological disruption while maintaining high levels of employee engagement (Busulwa et al., 2022).

Incorporating digital tools allows transformational leaders to create a culture that fosters continuous innovation. This leadership style not only improves operational outcomes but also empowers employees to embrace new ways of working. By setting a clear vision for the future, transformational leaders help their teams navigate technological shifts, ensuring that digital transformation becomes an integral part of the organizational strategy. This is particularly important in the hospitality industry, where customer expectations are constantly evolving and where competition is fierce. Leaders must ensure that their teams are not only prepared for these changes but also motivated to contribute to the organization's digital success, meaning they are enthusiastic about and actively involved in the digital transformation process (Fitriati & Marsanty, 2023). The ability to adapt and innovate has become an indispensable trait for leaders aiming to stay competitive in this highly digitalized market (Gupta et al., 2024).

Moreover, digital tools enable transformational leaders to implement more personalized strategies for managing employees and customer interactions. In a world where customer experiences are increasingly driven by data, transformational leaders in hospitality use big data analytics to understand customer behavior and preferences better. It allows organizations to tailor their services to meet individual needs, creating a more engaging and responsive customer experience (Omran et al., 2024; Shin, 2022). Additionally, AI and machine learning algorithms can be leveraged by leaders to optimize resource allocation, improve decision-making processes, and enhance overall operational efficiency in real time (Ahmed et al., 2024; Buhalis et al., 2023). These tools also facilitate better forecasting and anticipating customer needs, helping organizations stay ahead in a competitive market (Chen et al., 2021).

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The role of transformational leadership in the digital era is not confined to technological implementation alone. It also encompasses managing organizational identity changes and corporate culture shifts resulting from digitalization (Ponting, 2022). As digital transformation often leads to redefined roles and responsibilities, transformational leaders are tasked with ensuring that these shifts align with the organization's long-term vision and mission (Liu & Yang, 2021). Leaders must navigate these changes while maintaining the organization's core values. Transformational leaders can ensure that digitalization is aligned with the company's broader goals, driving efficiency, innovation, and resilience. This adaptability is essential in a post-pandemic world, where the hospitality industry must continuously evolve to survive and thrive (Filimonau & Naumova, 2019; Pillai et al., 2021).

Thus, transformational leadership is indispensable for ensuring that organizations in the hospitality industry successfully integrate digital tools and navigate the complexities of the digital era. By fostering a culture of innovation and resilience, transformational leaders enable their teams to adapt to rapid technological changes, driving operational excellence and long-term sustainability (Lathabhavan et al., 2024). This leadership style supports not only the adoption of digital technologies but also cultivates an organizational culture that is flexible and agile, ready to meet future challenges in an ever-changing digital landscape (Rodrigues et al., 2024).

B. Challenges and Opportunities of Digital Transformation in Hospitality Leadership

The journey of the hospitality industry toward digital transformation presents challenges and opportunities for leaders. Adopting advanced technologies like AI, big data, and blockchain can boost operational efficiency and enhance customer experiences. However, obstacles such as the gap in technical skills, resistance to adopting new systems, and high implementation costs continue to pose significant barriers to progress. Despite these challenges, leaders who can successfully navigate these difficulties have the chance to drive substantial innovation and build organizational resilience. The following section provides a review of 30 journals examining the various challenges and opportunities hospitality leaders encounter in digital transformation.

TABLE I

REVIEW OF CHALLENGES AND OPPORTUNITIES IN DIGITAL TRANSFORMATION LEADERSHIP			
Author	Challenges Identified	Opportunities Highlighted	Digital Tools Discussed
(Vial, 2019)	Organizational resistance to digital transformation, legacy systems	Enhanced decision-making, improved operational efficiency	AI, Big Data
(Busulwa et al., 2022)	High costs of digital implementation, lack of digital competencies in leadership	Strengthened hospitality management capabilities, digital strategy integration	AI, Cloud-Based Systems
(Binh Nguyen et al., 2023)	Rapidly evolving customer expectations, lack of integrated digital tools	Personalized marketing opportunities, improved customer engagement	Big Data Analytics, Digital Marketing Platforms
(S. Chen et al., 2021)	Challenges in adapting health protocols with digital systems post-COVID	Improved safety standards, efficient digital tracking and management systems	IoT, Big Data

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(Mohanty et al., 2020)	Resistance to adopting new digital tools, inadequate staff training for technology	Creation of immersive customer experiences using AR and VR	AR, VR
(Gupta et al., 2024)	Financial constraints, complex regulatory frameworks	Enhanced operational resilience, strategic opportunities during pandemic recovery	Blockchain, AI, Big Data
(Buhalis et al., 2023)	Disconnected legacy systems, lack of integration between digital platforms	Agile business ecosystems, smart city integration in hospitality	AI, IoT, Blockchain
(Shin & Jeong, 2022)	Customer satisfaction impacted by lack of seamless technology	Increased guest loyalty through luxury service enhanced by technology	AI, Guest Satisfaction Analytics
(Cheng et al., 2023)	Integration of digital tools with traditional systems, limited digital infrastructure	Improved data-driven decision-making and customer insights	Big Data, AI
(Zhu & Zhang, 2021)	Technological lag in small businesses, difficulties in digitalization	Increased competitiveness through digitalization in small hospitality businesses	Digital Transformation Systems
(Vo-Thanh et al., 2022)	High cost of digital service implementation, resistance to automation in fine-dining	Streamlined operations, enhanced customer experience through service digitalization	Digital Menu Systems, Automated Service Tools
(Romero & Lado, 2021)	Hesitancy toward robotic service systems, perceived loss of human touch in services	Improved operational efficiency, enhanced safety and prevention measures with service robots	Service Robots, AI
(Ahmed et al., 2024)	Resistance to digital leadership, lack of engagement in learning orientation	Fostering innovative work behavior, improved leader-member exchange (LMX) with technology	AI, Digital Communication Tools
(G. G. Liu et al., 2024)	Resistance to human-robot interaction, limited understanding of robotic benefits	Exploration of human-robot interaction benefits, improved service delivery with automation	AI, Robotics
(Whalen & Bowen, 2023)	Industry-wide shifts in trends challenging traditional hospitality services	Opportunities to create new service offerings through digital tools, increased adaptability	AI, Blockchain, Big Data
(Akbar & Tracogna, 2018)	Organizational challenges in transitioning to platform economies	Lower transaction costs, new business models in the sharing economy	Platform Economy Tools, Blockchain
(Buhalis & Leung, 2018)	Interoperability challenges between disconnected systems	Development of interconnected, smart ecosystems in hospitality	AI, IoT
(S. H. Chen et al., 2021)	Resistance to touchless service systems in hospitality	Improved operational efficiency, increased guest safety and satisfaction with touchless services	IoT, AI, Big Data
(Jansen et al., 2006)	Organizational innovation lag, lack of adaptive capacity in dynamic environments	Enhanced innovation through exploitation of new and existing technologies	Digital Innovation Systems
(Ferber & Vaziri, 2024)	Resistance from consumers based on age, discomfort with humanoid robots	Improved customer service, better engagement in retail scenarios with humanoid robots	Humanoid Robots, AI
(Filimonau & Naumova, 2020)	Technological complexity of blockchain adoption	Increased transparency and security in transactions, enhanced customer trust	Blockchain, Smart Contracts

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(C. Liu & Yang, 2024)	Strategic misalignment of digital tools with business goals	Increased productivity, improved competitiveness with digital technology integration	AI, Digital Strategy Tools
(Mariani et al., 2018)	Big data mismanagement, lack of data utilization in hospitality	Enhanced data-driven strategies, improved decision-making processes	Big Data, Business Intelligence
(Rodrigues et al., 2024)	Challenges in adopting Industry 4.0 technologies in tourism	New growth opportunities with digitalization, improved operational efficiency	AI, Industry 4.0 Technologies
(Gursoy et al., 2022)	Misunderstanding of the metaverse's role in hospitality	Expanded digital experiences for customers, new marketing strategies using the metaverse	Metaverse, Virtual Reality
(Kansakar et al., 2019)	Limited adoption of digital tools in traditional hospitality systems	Opportunities for operational optimization, enhanced customer engagement through digital tools	AI, Big Data, Automation Tools
(Pillai et al., 2021)	Hesitancy toward digital service tools in hospitality 5.0	Enhanced operational efficiency, customer satisfaction through hospitality 5.0	AI, Robotics, Automation
(AlNuaimi et al., 2022)	Organizational resistance to agility and digital transformation	Increased organizational agility, strategic alignment with digital transformation	AI, Cloud-Based Systems
(Antonopoulou et al., 2021)	Limited digital skills in educational leadership	Opportunities for digital skills enhancement, transformational leadership in education during the pandemic	Digital Learning Platforms, AI
(Kitsios & Kamariotou, 2021)	Lack of exploration in digitizing service innovation	New areas for innovation, improved service delivery through digital transformation	AI, Automation Tools

Table 1 provides an overview of the challenges and opportunities hospitality leaders encounter in the context of digital transformation. Key challenges include resistance to adopting new technologies, integration difficulties with legacy systems, and employee skills gaps.

Additionally, financial constraints and high implementation costs are significant barriers, particularly for smaller businesses within the industry. The complexities of implementing advanced technologies such as AI, big data, and blockchain, along with the resistance to change, create hurdles that leaders must navigate.

On the other hand, the table highlights numerous opportunities for leaders who successfully manage these challenges. Digital tools can enhance operational efficiency, improve decision-making, and deliver personalized customer experiences. Leaders who foster a culture of innovation and continuous learning can leverage technologies like AI and VR to improve guest satisfaction, streamline processes, and boost organizational resilience. Furthermore, the digital transformation journey opens up new possibilities for creating more innovative, agile business ecosystems, positioning organizations to meet evolving customer expectations better.

In summary, while the road to digital transformation in the hospitality industry is fraught with challenges, those who can overcome these obstacles stand to benefit greatly. The opportunities for innovation, enhanced customer experiences, and operational improvements are immense, making digital leadership not just crucial but empowering for long-term success in the increasingly digitalized landscape of the hospitality industry.

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B. The Role of Transformational Leadership in Fostering Innovation

Transformational leadership plays a crucial role in fostering innovation, particularly in the hospitality industry, which has undergone significant changes due to digital transformation and the challenges posed by the COVID-19 pandemic. As organizations navigate technological advancements, transformational leaders are essential in inspiring employees to embrace innovation and change, thus ensuring that digital transformation initiatives align with broader organizational goals (Vial, 2019).

Leaders who embrace a transformational style play crucial role in setting a clear vision, motivating their teams, and fostering a culture of continuous learning and innovation. It is particularly vital in an industry where customer expectations and technology rapidly evolve. By promoting an environment of trust and engagement, transformational leaders facilitate the integration of new technologies such as AI, big data, and blockchain, which enhance customer experiences and operational efficiency (Busulwa et al., 2022). Moreover, transformational leadership enables organizations to stay competitive by continuously adapting to market demands by exploring and implementing of innovative digital tools (Buhalis et al., 2023).

A key aspect of transformational leadership is inspiring employees to think creatively and find new ways to solve problems. In the hospitality industry, this is vital for creating unique and personalized guest experiences that leverage cutting-edge technology. For instance, leaders can use augmented reality (AR) and virtual reality (VR) to enhance customer engagement by offering immersive experiences (Mohanty et al., 2020). These tools improve customer satisfaction and position organizations to stand out in a crowded market by offering differentiated services (Shin & Jeong, 2022).

Moreover, transformational leadership fosters an innovative culture crucial for overcoming resistance to digital transformation. Employees may feel uncertain or even threatened by new technologies due to a perceived lack of skills or fear of job displacement. Transformational leaders address these concerns by investing in employee development and training, ensuring staff adapt to new technologies and processes (Ahmed et al., 2024). It is especially relevant in digital leadership, where innovation and technological adaptation are crucial to success (Liu et al., 2024).

The COVID-19 pandemic has accelerated the need for innovation in hospitality, and transformational leaders have been more than just instrumental—they have been the guiding light in these unprecedented times. For instance, adopting touchless services, including AI-driven customer interactions and digital check-ins, has become essential for maintaining health and safety standards while enhancing operational efficiency (Chen et al., 2021). Leaders who can inspire their teams to embrace these innovations will enhance the customer experience and drive the organization toward long-term resilience and sustainability (Pillai et al., 2021).

In addition to technological integration, transformational leadership plays a pivotal role in managing the cultural shifts accompanying digital transformation. Leaders must ensure that innovation is a strategic priority and embedded within the organizational culture. By aligning digital transformation initiatives with the company's core values, leaders can foster a sense of ownership and collaboration among employees, which is critical for sustaining innovation over the long term (Cheng et al., 2023).

In summary, transformational leadership is essential for fostering innovation in the hospitality industry. By motivating employees, promoting a culture of continuous learning, and playing a pivotal role in integrating new technologies into the organizational strategy, transformational leaders ensure that their organizations can navigate the challenges of digital transformation and seize the opportunities it presents. The confidence they instill in their teams through their ability

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to inspire and guide them through periods of change differentiates transformational leaders, making them pivotal to innovation success in the digital age (Gupta et al., 2024; Gursoy et al., 2022).

METHODOLOGY

The methodology for this literature review follows a systematic approach, designed to gather, analyze, and synthesize relevant academic articles on transformational leadership and its role in fostering innovation within the hospitality industry. The process began with identifying key research objectives, mainly focusing on the post-pandemic digital transformation landscape, a crucial study area in the current hospitality industry. A comprehensive search was conducted in databases such as Scopus, Web of Science, and Google Scholar to ensure the collection of high-quality and peer-reviewed articles.

The search strategy was based on a carefully designed search string incorporating relevant keywords related to transformational leadership, innovation, hospitality, and digital transformation. Boolean operators combined search terms, ensuring a balance between breadth and specificity. The initial search results included over 100 articles screened for relevance based on titles, abstracts, and keywords. The screening process focused on articles that provided detailed discussions on leadership styles, digital innovation, and the role of transformational leadership in the hospitality sector. After thorough screening, 30 highly relevant articles were selected for this review.

Basic search string:

("Transformational leadership" AND "digital transformation" AND "innovation" AND "hospitality industry") AND ("COVID-19" OR "pandemic")

Following selecting these articles, data analysis was conducted using VOSviewer, a powerful tool for creating network visualizations. The software allowed for identifying key terms, themes, and relationships between the selected literature. By mapping the co-occurrence of terms and concepts, the analysis provided more profound insights into the relationships between transformational leadership, digital transformation, innovation, and the hospitality industry. The use of VOSviewer ensures the validity and reliability of our findings.

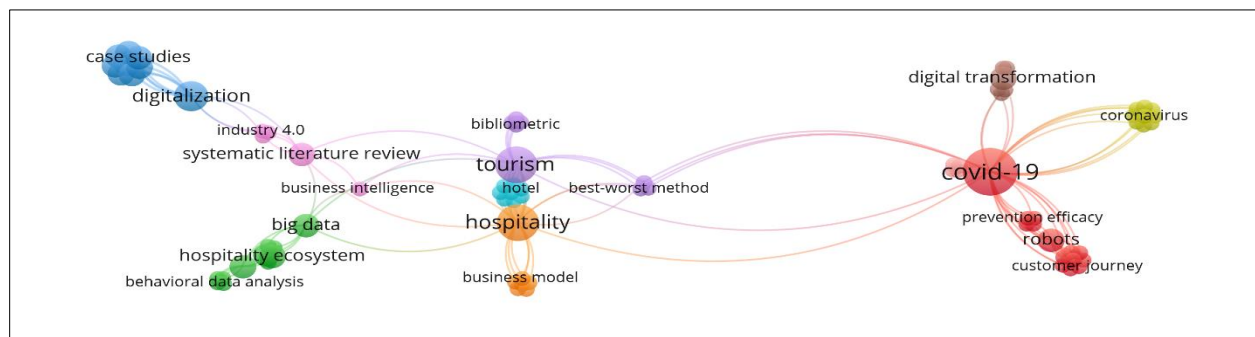


Fig. 1. Network Visualization of Innovation in Hospitality.

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Figure 1 presents a network visualization from the 30 selected journal articles using VOSviewer. The visualization reveals the main clusters of terms and their interconnections, reflecting the critical research areas related to transformational leadership and innovation in the hospitality industry. Larger nodes, such as "COVID-19," "hospitality," and "digital transformation," indicate frequent mentions and centrality within the literature, signifying their importance in the discourse. These terms are closely connected, emphasizing the direct impact of the pandemic on accelerating digital transformation efforts in hospitality.

Several other key terms, such as "big data," "robots," and "customer journey," represent the technological tools and innovations that are shaping modern hospitality. The connection between "digitalization" and "hospitality ecosystem" suggests that digital tools are becoming integral to enhancing the overall hospitality experience, from operational efficiency to customer engagement. Terms like "systematic literature review" and "case studies" reflect the research methodologies used within the selected articles, showcasing a data-driven approach to understanding leadership and innovation trends.

Moreover, "robots" and "prevention efficacy" highlight the growing role of automation and robotics in maintaining health and safety standards in a post-COVID-19 world. The visualization's prominence of "tourism" and "hospitality" underscores their close relationship, particularly in how technological advancements redefine customer experiences in both sectors. The co-occurrence of "big data," "business intelligence," and "hospitality ecosystem" suggests a growing focus on leveraging data to drive business decisions and improve customer outcomes. In conclusion, this visualization underscores the critical role of transformational leadership in guiding organizations through technological adoption and innovation in response to the pandemic. The interconnections between terms illustrate how digital tools, customer experiences, and leadership are intertwined in shaping the future of the hospitality industry.

RESULTS

The findings of this study emphasize the critical influence of leadership styles on the success of digital transformation initiatives within the hospitality industry. As organizations face the growing demands for digital tools and processes, leadership becomes a decisive factor in determining how effectively these innovations are adopted and implemented. Research indicates that transformational leadership, in particular, stands out as the most effective style in driving digital transformation, primarily due to its ability to inspire and motivate employees to embrace change and foster an innovative culture within the organization (Vial, 2019; Mohanty, 2020). This leadership style enables leaders to articulate a compelling vision for the future and encourages creative problem-solving and risk-taking, essential for navigating the complexities of digitalization (Busulwa, 2022).

In comparison, other leadership styles, such as transactional and servant leadership, are more limited in facilitating digital transformation. Transactional leaders, who focus on task-oriented behaviors and reward-based systems, are more likely to achieve incremental improvements in operational efficiency but may fall short in inspiring long-term innovation (Gupta, 2024). Servant leadership, emphasizing an employee well-being, contributes to higher levels of employee

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satisfaction but may not directly drive technological adoption and digital innovation (Liu, 2024). The table below compares how various leadership styles impact digital transformation outcomes and the resulting organizational benefits.

As illustrated in Table 2, leadership styles are pivotal in shaping digital transformation outcomes within the hospitality industry. Various leadership approaches, such as transformational, adaptive, and innovation-driven leadership, strongly correlate with successful digital initiatives. Leaders emphasizing flexibility, technological adoption, and employee engagement can significantly improve customer satisfaction, operational efficiency, and organizational resilience. In particular, leadership styles that focus on innovation and adaptability tend to foster a culture of continuous improvement, positioning organizations to navigate market shifts and emerging technologies better.

Moreover, the table highlights how certain leadership traits, such as customer-centricity, strategic foresight, and the promotion of digital skills, contribute directly to organizational success. The integration of advanced digital tools like AI, blockchain, and IoT, facilitated by visionary leadership, allows for enhanced customer experiences, streamlined operations, and improved transparency. Overall, the diverse leadership styles shown in Table 2 underscore the importance of aligning leadership strategies with digital goals to remain competitive in the post-pandemic hospitality landscape, which has seen significant shifts in [specific changes in the post-pandemic hospitality landscape].

The conceptual framework developed in this study is analyzing leadership styles and their impact on digital transformation outcomes in the hospitality industry. The framework synthesizes the insights from 30 academic journals, showing how leadership styles influence vital organizational outcomes, such as transformational, innovation-driven, adaptive, and digital leadership. By integrating critical traits like strategic foresight, adaptability, and technological integration, leaders can drive successful digital transformation in their organizations, enabling them to achieve operational efficiency, enhance customer engagement, and foster innovation.

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TABLE II

IMPACT OF LEADERSHIP STYLES ON DIGITAL TRANSFORMATION OUTCOMES IN THE HOSPITALITY INDUSTRY

Author (Year)	Leadership Style	Key Traits	Impact on Digital Transformation	Organizational Outcomes
Vial, Gregory (2019)	Strategic Leadership	Visionary, proactive in technology integration	Drives strategic adoption of digital technologies	Enhanced competitiveness, improved digital adaptability
Busulwa, Richard (2022)	Transformational Leadership	Inspirational, empowers team innovation	Enhances digital competency frameworks within hospitality	Improved innovation culture, adaptable workforce
Binh Nguyen, Phuong Minh (2023)	Adaptive Leadership	Flexible, responsive to market shifts	Fosters agile adaptation to changing digital trends	Increased resilience, agile service offerings
Chen, Sirong (2021)	Servant Leadership	Prioritizes employee development, empathetic	Supports sustainable digital transformation through employee buy-in	Stronger employee engagement, retention of talent
Mohanty, Priyakrushna (2020)	Innovation-Driven Leadership	Forward-thinking, values creative digital solutions	Facilitates adoption of AR/VR technologies for unique experiences	Improved customer satisfaction, differentiated service offerings
Gupta, Srikant (2024)	Transformational Leadership	Resilience, strategic foresight, adaptability	Enabled leaders to prioritize health safety measures, boosting customer confidence	Enhanced customer loyalty, operational efficiency
Buhalis, Dimitrios (2023)	Smart Hospitality Leadership	Customer-centric, technology integration, agile	Fostered a seamless customer experience by integrating smart systems in operations	Elevated customer satisfaction, stronger market positioning
Shin, Hyejo Hailey (2022)	Luxury Service Leadership	Personalization, high-tech and luxury balance	Leveraged luxury–technology fit to align digital services with high-end guest expectations	Increased brand loyalty, perceived value enhancement
Cheng, Xusen (2023)	Innovation-Oriented Leadership	Focus on creative digital transformation	Drives adoption of innovative digital processes	Greater innovation, organizational adaptability

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Zhu, Ruilin (2021)	Transformational Leadership	Strategic adaptability, resilience, proactive change	Enhanced digitization in small hospitality businesses post-pandemic, greater operational flexibility	Increased business continuity, resilience in crisis management
Vo-Thanh, Tan (2022)	Service-Oriented Leadership	Customer-centric, innovation-driven	Service digitalization tailored to fine dining with cost-benefit analysis	Improved customer experience, cost optimization, competitive positioning
Romero, Jaime (2021)	Technology-Adaptive Leadership	Emphasis on tech-based solutions, customer health	Implementation of robots for customer service to minimize COVID-19 contagion risk	Increased customer trust, booking intentions, health safety perception
Ahmed, F (2024)	Digital Leadership	LMX (Leader-Member Exchange), learning orientation	Promotes innovation adoption, improves decision-making processes	Organizational agility, increased innovation
Liu, Gus Guanrong (2024)	Transformational Leadership	Encourages employee adaptability	Drives digital change adoption by fostering a learning culture	Improved employee adaptability, organizational resilience
Whalen, Elizabeth (2023)	Visionary Leadership	Forward-looking, focused on tourism challenges	Anticipates future disruptions and opportunities in the tourism industry	Improved strategic planning, adaptability in tourism
Akbar, Yusaf H. (2018)	Transactional Leadership	Cost-efficiency, platform economics	Emphasizes on cost-cutting measures while maintaining performance	Reduced operational costs, optimized platform-based services
Buhalis, Dimitrios (2018)	Ecosystem-Based Leadership	Interconnectivity, platform optimization	Promotes seamless integration of multiple platforms and stakeholders	Increased operational efficiency, improved collaboration
Chen, Shu Hsiang (2021)	Transformational Leadership	Focus on high-tech, "no-touch" service delivery	Facilitates high-tech adoption, reduces reliance on physical interactions	Enhances customer satisfaction, aligns with post-pandemic hygiene preferences
Jansen, Justin J.P. (2006)	Exploratory & Exploitative Leadership	Balances innovation with operational consistency	Encourages innovative digital solutions, stabilizes existing processes	Continuous improvement, operational reliability
Ferber, Tom (2024)	Technology-Driven Leadership	Adapts leadership to emerging robotic technologies	Enhances human-robot interaction for better customer service	Improved customer experience, operational automation

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Filimonau, Viachaslau (2020)	Innovation-Oriented Leadership	Blockchain for transparency and security	Implements blockchain in hospitality for secure, transparent operations	Enhanced transparency, operational reliability
Liu, Chun (2024)	Strategic Leadership	Dynamic capabilities and strategic foresight	Facilitates adoption of self-service technologies post-COVID-19	Enhanced resilience, improved service continuity
Mariani, Marcello (2018)	Data-Driven Leadership	Data analytics, big data	Integrates data analytics for informed decision-making	Improved operational efficiency, data-driven strategies
Rodrigues, Vitor (2024)	Industry 4.0 Leadership	Emphasis on automation and smart technologies	Drives the use of smart technologies to improve tourism and hospitality operations	Improved operational efficiency, enhanced customer service
Gursoy, Dogan (2022)	Metaverse Leadership	Focus on immersive digital experiences	Promotes the use of virtual reality and the metaverse in hospitality	Enhanced customer engagement, innovative service offerings
Kansakar, Prasanna (2019)	Digital Leadership	Strategic use of emerging technologies, customer focus	Enhanced personalization, IoT for tailored experiences	Improved customer engagement, increased operational efficiency
Pillai, Souji (2021)	Transformational Leadership	Hygiene and safety, adaptive use of AI	Facilitated safe, contactless services, heightened cleanliness protocols	Increased customer confidence, loyalty, safety perception
AlNuaimi, B K (2022)	Agile Leadership	Strategic agility, digital adaptability	Fostered organizational agility through integrated digital strategies	Improved adaptability, resilience in changing environments
Antonopoulou, Hera (2021)	Transformational Leadership	Focus on digital skills, educational adaptation	Promotes the development of digital competencies during the COVID-19 pandemic	Improved educational outcomes, enhanced digital learning infrastructure
Kitsios, Fotis (2021)	Innovation-Focused Leadership	Exploration and exploitation of digital opportunities	Drives service digitization, leveraging innovative processes	Increased service quality, digital innovation

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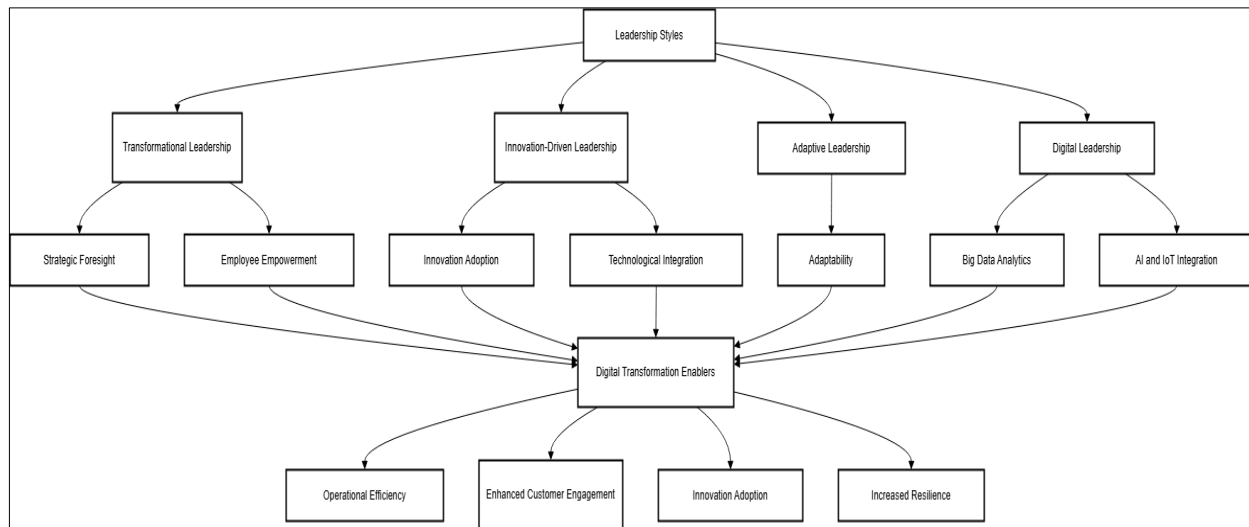


Fig. 2. Conceptual Framework Developed by the Author.

The conceptual framework highlights the integral role that various leadership styles play in facilitating digital transformation within the hospitality industry. The framework begins by focusing on four primary leadership styles: Transformational Leadership, Innovation-Driven Leadership, Adaptive Leadership, and Digital Leadership. Each of these styles contributes to digital transformation in unique ways. For example, transformational leadership encourages continuous innovation and empowers employees to engage with new technologies (Busulwa, 2022; Chen, 2021). On the other hand, innovation-driven leadership focuses on integrating cutting-edge digital tools like AI and IoT into operations, which is essential for staying competitive in a fast-paced digital world (Buhalis, 2023; Filimonau, 2020).

Key leadership traits, such as Strategic Foresight and Employee Empowerment, are crucial for ensuring successful digital transitions. Leaders with a clear strategic vision, a necessity in guiding their organizations through complex digital transformations, can empower their employees to embrace new roles and responsibilities. This empowerment is especially critical in the hospitality sector, where employee adaptability to new technologies can enhance customer service and operational efficiency (Ahmed et al., 2024; Vial, 2019). Similarly, innovation-driven leaders prioritize Technological Integration and Innovation Adoption, fostering an environment where digital tools can be implemented effectively and sustainably (Mohanty, 2020).

As these leadership traits converge, they enable organizations to embrace Digital Transformation Enablers such as big data analytics, AI, and IoT, which are critical for enhancing operational efficiency and, importantly improving the customer experience (Buhalis, 2018; Romero, 2021). By focusing on these enablers, leaders can ensure that their organizations are not just adopting technology, but fully integrating it into their operations for maximum benefit, thereby unlocking the potential for significant improvement and growth.

The organizational outcomes of this process include Operational Efficiency, Enhanced Customer Engagement, Innovation Adoption, and Increased Resilience. These outcomes reflect the success of leadership efforts to navigate the complexities of digital transformation. By leveraging digital tools effectively, hospitality organizations can streamline their operations, offer personalized customer experiences, and remain resilient in the face of external challenges, such as market fluctuations or crises (Gursoy et al., 2022; Rodrigues et al., 2024). Ultimately, the

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framework illustrates how leadership styles that emphasize innovation, adaptability, and strategic integration of technology can drive lasting organizational success in the digital era.

DISCUSSION

The primary objective of this study is to explore how innovative transformational leadership can support and facilitate digital transformation in the post-pandemic hospitality industry. The findings emphasize that transformational leadership is a crucial in guiding organizations through the complexities of digitalization. The leadership styles and their key traits—such as innovation, adaptability, and learning orientation—play a critical role in driving organizational outcomes like enhanced operational efficiency, customer engagement, and organizational resilience. As the hospitality industry increasingly relies on advanced digital technologies, such as AI, big data, and IoT, the role of leadership becomes even more vital in ensuring that these technologies are adopted and integrated effectively.

Transformational leadership is characterized by its ability to inspire and motivate employees to exceed their performance expectations, especially during times of change (Busulwa, 2022). This leadership style encourages a proactive approach to managing digital transformation by fostering a culture that values continuous learning and innovation. In the hospitality industry context, this is particularly important given the significant disruptions caused by the COVID-19 pandemic. The pandemic highlighted the need for digital transformation, as customers increasingly demand contactless services, personalized experiences, and streamlined operations (Vial, 2019). Transformational leaders who can articulate a clear vision for technological integration and create an environment that promotes innovation are more likely to succeed in leading their organizations through this digital transition (Mohanty, 2020).

The post-pandemic hospitality industry is marked by rapid digitalization, with many organizations adopting technologies such as AI, virtual reality (VR), and augmented reality (AR) to enhance customer experience and operational efficiency. As noted by Zhu (2021), transformational leadership is essential in guiding the successful adoption of these technologies. Leaders must be adept at navigating the technical aspects of digital transformation and be skilled in managing the human side of change. Resistance to change, a common challenge in digital transformation efforts, can be mitigated through transformational leadership by empowering employees, fostering open communication, and creating a shared sense of purpose (Buhalis, 2023).

Furthermore, adopting digital tools in hospitality often requires a shift in organizational culture, as employees need to adapt to new technologies and processes. Leaders who practice transformational leadership are better equipped to manage this cultural shift by promoting a learning orientation within their teams (Chen, 2021). A learning-oriented culture encourages employees to continuously acquire new skills and knowledge, which is crucial for adapting to the rapidly evolving digital landscape. In this way, transformational leadership supports ~~not only~~ the technical aspects of digital transformation and the broader organizational changes required for its success.

One of the key findings of this study is the importance of leader-member exchange (LMX) in facilitating digital transformation. High-quality LMX relationships, characterized by trust, respect, and mutual support, foster employee engagement and commitment to organizational goals, overall

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determining the organization's success (Ahmed, 2024). In digital transformation, strong LMX relationships can help reduce resistance to change and encourage employees to embrace new technologies. Leaders who invest in building strong relationships with their employees are better positioned to lead successful digital transformation initiatives, as they can more effectively communicate the benefits of technological change and address any concerns employees may have (Shin, 2022).

The study also highlights the role of learning orientation in driving digital transformation. Leaders who promote a learning-oriented culture encourage continuous improvement and innovation, which is essential for staying competitive in the digital age. As noted by Cheng (2023), organizations prioritizing learning are better equipped to respond to technological changes and capitalize on new opportunities. In the hospitality industry, where customer preferences and technological advancements constantly evolve, learning orientation allows organizations to remain agile and responsive. Transformational leaders who foster a culture of continuous learning ensure that their teams are prepared to adapt to new technologies and processes, thus facilitating successful digital transformation.

In addition to transformational leadership, digital leadership is emerging as a critical factor in driving digital transformation in the hospitality industry. Digital leadership uses tools and technologies to improve organizational outcomes, such as operational efficiency, customer satisfaction, and innovation. According to Buhalis (2023), digital leaders are adept at integrating technologies like big data analytics, AI, and IoT into their operations, allowing organizations to make data-driven decisions and optimize their processes. Digital leadership has become increasingly important in the post-pandemic era as organizations seek to enhance their digital capabilities to meet changing customer expectations.

Digital leadership also plays a crucial role in fostering innovation within the hospitality industry. Leaders who can harness the potential of digital technologies can create new business models and service offerings that differentiate their organizations from competitors. For example, using AI-powered customer service tools and chatbots can improve the efficiency and quality of customer interactions, leading to higher customer satisfaction (Romero, 2021). Additionally, integrating big data analytics allows organizations to gain insights into customer preferences and behaviors, enabling them to deliver more personalized and targeted services (Liu, 2024). Leaders who embrace digital leadership are better positioned to drive innovation and ensure their organizations remain competitive in the digital era.

The study's findings also underscore the importance of adaptability in leadership. Leaders must be flexible and responsive to new developments in a rapidly changing digital environment. Adaptive leadership, which emphasizes the ability to adjust strategies and approaches in response to changing circumstances, is precious in digital transformation (Vo-Thanh, 2022). Leaders who demonstrate adaptability are more likely to successfully navigate the challenges of digital transformation, such as the need to integrate new technologies, manage resistance to change, and align digital initiatives with organizational goals.

Moreover, the study reveals that digital transformation in the hospitality industry has challenges. High implementation costs, a lack of digital skills among employees, and resistance to change are common obstacles organizations face when adopting new technologies (Gupta, 2024). However, leaders who practice transformational and digital leadership are better equipped to overcome these challenges by fostering a culture of innovation, investing in employee

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development, and aligning digital initiatives with broader organizational objectives (Pillai, 2021).

By addressing these challenges, leaders can unlock the full potential of digital transformation and position their organizations for long-term success.

In conclusion, the discussion highlights the critical role of innovative transformational leadership in supporting and facilitating digital transformation in the post-pandemic hospitality industry. Leaders who emphasize learning orientation, foster high-quality LMX relationships, and adopt digital leadership strategies are better equipped to navigate the complexities of digital transformation. These leaders can drive organizational success in a rapidly changing digital landscape by leveraging leadership traits such as innovation, adaptability, and strategic foresight. The study contributes to the existing literature by bridging the gap between transformational leadership and digitalization, offering valuable insights into how leadership can drive organizational success in the digital era.

CONCLUSION, LIMITATIONS, AND IMPLICATIONS

This study concludes that innovative transformational leadership is pivotal in driving and facilitating digital transformation within the post-pandemic hospitality industry. Transformational leaders who foster a culture of continuous learning, build leader-member solid relationships (LMX), and promote adaptability are crucial in guiding their organizations through the complexities of digitalization. Leaders can enhance operational efficiency, boost customer engagement, and foster innovation by leveraging advanced technologies such as AI, big data, and IoT. The study also emphasizes the importance of digital leadership, where leaders who embrace and integrate digital tools are better positioned to meet evolving customer expectations and remain competitive in an increasingly digital world.

In the face of challenges such as high implementation costs and resistance to change, leaders who practice both transformational and digital leadership can mitigate these barriers by empowering their employees, fostering innovation, and aligning digital initiatives with broader organizational goals. This research adds to the existing body of knowledge by providing a comprehensive understanding of how transformational leadership supports digital transformation in the hospitality industry, highlighting the importance of leadership in shaping the future of organizations in an era defined by rapid technological advancements and digital disruption.

Despite the significant findings, this study has limitations that should be acknowledged. First, the focus on transformational leadership within the specific context of the hospitality industry may limit the generalizability of the results to other sectors. The industry-specific challenges, such as high customer interaction and service orientation, might lead to different leadership dynamics compared to other industries. Additionally, the study largely relies on literature and theoretical analysis, which may benefit from further empirical research to validate the proposed frameworks and leadership impacts in real-world settings. Future research could expand the scope to include longitudinal studies and diverse industries to provide a more comprehensive understanding of how leadership styles influence digital transformation across different contexts.

Nevertheless, the study offers valuable implications for both practitioners and researchers. For industry leaders, the findings highlight the critical need to develop leadership strategies that align with technological advancements, fostering innovation and resilience in the face of rapid digital

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change. For researchers, this study opens avenues to explore the intersection of leadership and digital transformation further, with a focus on adaptive and innovative leadership styles.

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