Entrepreneurial Orientations and Digital Transformation Commitment in Hospitality Industry: The Pivotal Role of Technology Readiness

Anh Viet Tran¹, Nguyen Thi Tuyet Nhung²

¹ Hung Vuong University of Ho Chi Minh City, Ho Chi Minh City, Vietnam ² Industrial University of Ho Chi Minh City, Ho Chi Minh City, Vietnam tvanh@dhv.edu.vn, nguyenthituyetnhung@iuh.edu.vn (Corresponding author)

Abstract. This study investigated the relationships between entrepreneurial orientation dimensions, technology readiness, and digital transformation commitment in the hospitality industry. The research examined how innovativeness, proactiveness, and risk-taking influenced technology readiness and its mediating role in fostering digital transformation commitment. Data were collected from 142 hospitality employees in Vietnam through structured questionnaires and analyzed using partial least squares structural equation modeling (PLS-SEM). Results revealed that all three entrepreneurial orientation dimensions positively influenced technology readiness, with proactiveness showing the strongest effect, followed by innovativeness and risk-taking. Technology readiness strongly predicted digital transformation commitment, and mediated the relationships between entrepreneurial orientations and transformation outcomes. The findings highlighted technology readiness as a critical mechanism through which entrepreneurial orientations translate into successful digital transformation, providing important implications for hospitality managers navigating digital change.

Keywords: digital transformation; sustainable tourism; industry 5.0; innovation management; tourism resilience.

1. Introduction

The hospitality industry stands at a critical juncture where digital transformation has evolved from a competitive advantage to an existential imperative. The COVID-19 pandemic has dramatically accelerated this transition, fundamentally altering how hospitality businesses operate, deliver services, and create value for stakeholders (Khoa & Thanh, 2025; Mountije et al., 2025). As Rupeika-Apoga et al. (2022) observed, the pandemic has fueled digital transformation across industries, accelerating overall digital adoption by three to seven years in a matter of months. This unprecedented shift has particularly impacted the hospitality sector, where traditional business models centered on personal interaction and physical presence have been challenged by social distancing requirements and changing consumer preferences. Digital transformation represents a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an entity and redefine its value proposition for its stakeholders (Gong & Ribiere, 2021; Tran & Khoa, 2025). In the hospitality context, this transformation encompasses everything from contactless check-ins and digital payment systems to artificial intelligence-powered customer service and data-driven personalization. The challenge is particularly acute for small and medium-sized enterprises (SMEs), which constitute the backbone of the hospitality industry. As Satar et al. (2025) note, SMEs are not prompt enough in digital transformation, and the smaller the company, the lower the probability of introducing new digital solutions. This digital divide threatens the survival and competitiveness of hospitality SMEs in an increasingly digital marketplace, necessitating urgent research into the factors that facilitate successful digital transformation in this sector.

The relationship between entrepreneurial orientation (EO) and digital transformation has emerged as a critical area of investigation in recent management literature. EO, conceptualized as a strategic posture characterized by innovativeness, proactiveness, and risk-taking (Covin & Slevin, 2006; Hongli et al., 2022), has been identified as a potential driver of organizational adaptation and transformation. Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes (Gupta & Dutta, 2018), while proactiveness denotes a forward-looking perspective characteristic of a marketplace leader (Dess & Lumpkin, 2005; Uyen et al., 2025), and risktaking involves committing resources to ventures with uncertain outcomes. Recent empirical evidence suggests that EO dimensions significantly influence digital transformation outcomes. Maseda et al. (2025) found that innovativeness and risk-taking positively influence digital transformation in family SMEs. Similarly, Baldegger et al. (2021) demonstrated that EO is significantly associated with firms' degree of digitization, suggesting that entrepreneurially oriented firms are more likely to embrace digital technologies. The concept of organizational readiness has emerged as a crucial mediating factor in the digital transformation process. Weiner (2020) conceptualized readiness as being both willing and able, encompassing psychological and behavioral preparedness for change. In the digital context, technology readiness represents organizational competence, expertise, and talent in operating digital technology for developing new products or services (Khin & Ho, 2019). Empirical research has confirmed that digital capability positively affects digital transformation, with companies possessing higher digital capabilities demonstrating greater success in transformation initiatives.

Despite growing interest in digital transformation and entrepreneurial orientation, a critical gap exists in understanding how these constructs interact within the specific context of the hospitality industry. While previous studies have examined EO's impact on digital transformation in manufacturing and family SMEs (Giraldo et al., 2024), the unique characteristics of hospitality businesses—including service intensity, customer-centricity, and experiential focus—may create distinct dynamics that existing research has not adequately addressed. Furthermore, the mediating role of technology readiness in translating entrepreneurial orientations into digital transformation commitment remains unexplored in hospitality settings, representing a significant theoretical and practical knowledge gap.

This study aims to address these gaps by investigating the relationships between entrepreneurial

orientation dimensions, technology readiness, and digital transformation commitment in the hospitality industry. Specifically, the research objectives are: (1) to examine how the three dimensions of entrepreneurial orientation—innovativeness, proactiveness, and risk-taking—individually influence technology readiness in hospitality organizations; (2) to investigate the mediating role of technology readiness in the relationship between entrepreneurial orientations and digital transformation commitment; and (3) to provide empirical evidence from the Vietnamese hospitality sector, a rapidly developing market experiencing significant digital transformation pressures. By achieving these objectives, this study contributes to both theoretical development and practical understanding. Theoretically, it extends EO and digital transformation literature by examining their interaction in a service-intensive context and introducing technology readiness as a critical mediating mechanism. Practically, it provides hospitality managers and policymakers with insights into fostering successful digital transformation through the development of entrepreneurial capabilities and technological readiness.

This paper is organized as follows: Section 2 reviews relevant literature and develops research hypotheses. Section 3 presents the research methodology, including measurement scales and data collection procedures. Section 4 reports the empirical results. Section 5 discusses findings, contributions, limitations, and future research directions, followed by conclusion.

2. Literature review

2.1. Entrepreneurial Orientations in Hospitality Industry

Entrepreneurial orientation (EO) represents a strategic posture characterized by a firm's propensity to engage in entrepreneurial activities through three core dimensions: innovativeness, proactiveness, and risk-taking (Covin & Slevin, 2006). In the hospitality industry context, these dimensions manifest uniquely due to the sector's service-intensive nature and customer-centric focus. Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Hongli et al., 2022; Lumpkin & Dunn, 2011). Proactiveness denotes a forward-looking perspective characteristic of a marketplace leader that has the foresight to seize opportunities in anticipation of future demand (Dess & Lumpkin, 2005). Risk-taking involves making strategic decisions with uncertain outcomes and committing substantial resources to ventures in uncertain environments (Khoa, 2025; Rauch et al., 2018). These entrepreneurial characteristics become particularly crucial in the hospitality sector, where rapid technological advancement and changing consumer preferences demand continuous adaptation and innovation. The COVID-19 pandemic has further amplified the importance of entrepreneurial orientation, as hospitality firms must navigate unprecedented challenges while embracing digital transformation to ensure survival and competitive advantage (Kraus et al., 2022)

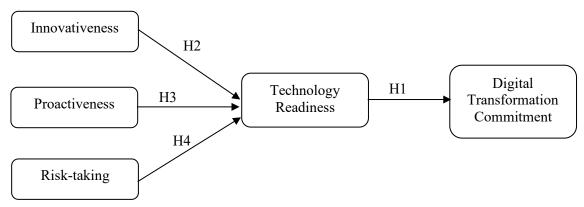


Fig. 1: Research model

2.2. Hypotheses development

The relationship between technology readiness and digital transformation commitment emerges as a fundamental consideration in understanding organizational digital evolution. Digital transformation represents a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an entity and redefine its value proposition for its stakeholders (Gong & Ribiere, 2021). Technology readiness, encompassing an organization's psychological and behavioral preparedness to embrace digital change, serves as a critical antecedent to successful digital transformation initiatives. Research demonstrates that digital transformation requires not merely technological implementation but a comprehensive organizational commitment to change (Vial, 2021). As Weiner (2020) conceptualized, organizational readiness reflects being both willing and able - encompassing psychological readiness and behavioral preparedness to advance digitalization efforts. This dual nature of readiness proves essential, as digital transformation demands a positive and supportive climate to bring the digital technologies inside the organization and to facilitate the adoption and diffusion process (Nguyen & Sharma, 2024).

Furthermore, digital capability, representing organizational competence and expertise in operating digital technology, significantly influences digital transformation outcomes (Khin & Ho, 2019). The empirical evidence suggests that companies with higher digital capabilities demonstrate greater success in digital transformation initiatives, with digital capability showing a positive direct effect on digital transformation (Dat et al., 2025). This relationship underscores how technological readiness creates the necessary foundation for organizations to commit to and successfully implement digital transformation strategies. Therefore, we hypothesize that technology readiness positively impacts digital transformation commitment.

H1: Technology Readiness positively impacts Digital Transformation Commitment in Hospitiality industry.

The innovativeness dimension of entrepreneurial orientation plays a pivotal role in shaping organizational technology readiness. Innovativeness represents a firm's propensity to engage in creative processes, experimentation, and the development of novel solutions (Cuong et al., 2025). This entrepreneurial characteristic directly influences how organizations perceive and prepare for technological adoption. Empirical research demonstrates that innovativeness significantly affects digital transformation processes. Khanh et al. (2025) found that the innovativeness dimension of EO positively relates to digital transformation, suggesting that firms with higher innovativeness levels display greater willingness to embrace digitalization processes. This relationship extends to technology readiness, as innovative firms typically exhibit enhanced capacity for identifying and exploiting digital opportunities.

Moreover, digitally oriented companies demonstrate superior innovation capabilities due to their broader vision and commitment to utilizing new technologies for developing innovative products and services (Khin & Ho, 2019). The literature suggests that EO has a significant impact on innovation and that digitization impacts an organization's innovative capacity (Baldegger et al., 2021). This interconnection indicates that innovativeness creates an organizational environment conducive to technological exploration and adoption. The positive relationship between innovativeness and technology readiness is further supported by findings that entrepreneurial firms display bold innovative behavior and willingness to accept considerable risks in business endeavors (Miller & Friesen, 1982). Such characteristics naturally predispose organizations toward greater technological openness and readiness. Therefore, we propose that innovativeness positively impacts technology readiness.

H2: Innovativeness positively impacts Technology Readiness in Hospitiality industry.

Proactiveness, as a core dimension of entrepreneurial orientation, encompasses opportunity-seeking behavior and forward-looking perspectives that enable organizations to anticipate future market demands (Anderson et al., 2015). This strategic posture significantly influences an organization's

approach to technological adoption and readiness. Research indicates that proactive firms demonstrate superior capability in identifying market opportunities and capturing them to improve competitive positioning. In the digital context, proactiveness facilitates early recognition of technological trends and opportunities. As Baldegger et al. (2021) note, proactiveness and risk-taking as contextual elements of EO are considered key elements in internationalization-focused EO, suggesting that proactive firms actively explore new opportunities rather than exploiting established structures.

The relationship between proactiveness and technology readiness manifests through enhanced organizational agility and responsiveness to environmental changes. Proactive firms typically seeks to develop and present new products and/or services ahead of its competition and acts in expectation of future demand (Baldegger et al., 2021). This forward-thinking approach naturally extends to technological preparedness, as proactive organizations invest in building capabilities before they become market necessities. However, it is noteworthy that some research has found mixed results regarding proactiveness and digital transformation. Maseda et al. (2025) discovered that proactiveness did not significantly affect digital transformation in their study of family SMEs. Nevertheless, this finding may be context-specific, as the authors suggest that digitalization processes are already well-established in many companies, potentially reducing the advantage of being first movers. In the hospitality industry, where customer expectations and technological innovations evolve rapidly, proactiveness likely maintains its importance for technology readiness. Thus, we hypothesize that proactiveness positively impacts technology readiness.

H3: Proactiveness positively impacts Technology Readiness in Hospitiality industry.

Risk-taking, the third dimension of entrepreneurial orientation, reflects an organization's willingness to commit resources to ventures with uncertain outcomes and engage in bold actions in uncertain environments (Lomberg et al., 2017). This entrepreneurial characteristic fundamentally shapes how organizations approach technological adoption and digital readiness. Empirical evidence strongly supports the positive relationship between risk-taking and digital transformation initiatives. Polas et al. (2022) found that risk-taking positively influences digital transformation, indicating that firms willing to embrace uncertainty demonstrate greater commitment to digitalization processes. This relationship is particularly relevant for technology readiness, as digital initiatives inherently involve uncertainty and require substantial resource commitments.

The literature suggests that risk-taking propensity enables firms to pursue more entrepreneurial activities with higher levels of experiential knowledge (Islam et al., 2022). In the technological context, this translates to greater willingness to experiment with emerging technologies and digital solutions. As Chen et al. (2022) observe, only those firms which are particularly proactive and risk-prone are likely to have switched to a digital way of doing business. Furthermore, the relationship between risk-taking and technology readiness is reinforced by the understanding that digital transformation requires organizations to venture beyond established practices and embrace uncertainty. The ability to tolerate ambiguity and potential failure becomes crucial for building technological capabilities (Ojeme et al., 2019). Organizations with higher risk-taking orientations are better positioned to allocate resources toward uncertain digital ventures, experiment with new technologies, and develop the competencies necessary for digital readiness. Therefore, we propose that risk-taking positively impacts technology readiness.

H4: Risk-taking positively impacts Technology Readiness in Hospitiality industry.

3. Method

This study employed a quantitative research approach utilizing established measurement scales to examine the relationships between entrepreneurial orientations, technology readiness, and digital transformation commitment in the hospitality industry. All constructs were measured using multi-item scales on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), consistent with recommendations for achieving optimal distribution properties and respondent discrimination (Hair,

Ringle, & Sarstedt, 2011).

Following Covin and Slevin (2006), entrepreneurial orientation was operationalized through its three main dimensions: innovativeness, proactiveness, and risk-taking. Wales et al. (2021) call this threedimensional method the dominant design in EO research since it has been verified in many scenarios. Three questions derived from firm's creative process and support for new ideas. Examples were: In our organization, we favor a strong emphasis on R&D, technological leadership, and innovations & Our organization has marketed many new lines of products/services in the past three years. These fit Lumpkin and Dess (1996) definition of innovativeness as a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes. The organization's forward-thinking and opportunity-seeking conduct were measured by three items. From Covin and Slevin (2006)'s validated scale, In dealing with competitors, our organization typically initiates actions which competitors then respond to and We are often the first to introduce new products/services, administrative techniques, or operating technologies. Proactivity is a forward-looking perspective characteristic of a marketplace leader that has the foresight to seize opportunities in anticipation of future demand (Dess & Lumpkin, 2005). Risk-taking (RTA) was tested using three measures that assessed the organization's willingness to take risks and invest in risky initiatives. Examples were: Our organization has a strong proclivity for high-risk projects with chances of very high returns & We typically adopt a bold, aggressive posture to maximize the probability of exploiting potential opportunities. These items represent risk-taking as choices with unknown outcomes in unpredictable situations (Lumpkin & Dess, 1996). This study used a four-item scale based on organizational preparation for change (Weiner, 2020) and digital capabilities literature (Khin & Ho, 2019) to assess technology readiness (TER). The scale measured both psychological and behavioral technological readiness to represent being willing and able to adapt to digital transformation (Weiner, 2020). Such as: Our organization has the necessary technological infrastructure to support digital transformation, Our employees possess adequate digital skills and competencies, We have dedicated resources allocated for technology adoption and upgrades, & Our organizational culture supports technological innovation and experimentation. DTC was measured using a four-item scale developed from prior study (Gong & Ribiere, 2021; Vial, 2021). The scale shows the organization's commitment to digital-enabled change. Says: Our organization is fully committed to implementing digital transformation initiatives, Digital transformation is a strategic priority in our business planning, we actively invest in digital technologies to transform our business processes, & Our leadership demonstrates strong support for digital transformation efforts. Digital transformation is a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities (Gong & Ribiere, 2021).

The research employed a purposive sampling strategy to select participants from the hospitality industry in Vietnam, a rapidly developing market experiencing significant digital transformation pressures. The target sample comprised 142 employees working in various hospitality establishments, including hotels, restaurants, and tourism services. This sample size exceeds the minimum requirement for PLS-SEM analysis, which suggests 10 times the maximum number of paths directed at any construct in the structural model (Hair Jr et al., 2016). The sample demonstrates balanced gender representation and encompasses various age groups, with the majority (65.5%) being between 26 and 45 years old. Educational attainment is relatively high, with 66.9% holding bachelor's degrees or higher, reflecting the increasing professionalization of the Vietnamese hospitality sector. The distribution across organization types provides comprehensive coverage of the hospitality industry's main segments.

4. Result

The research employed partial least squares structural equation modeling (PLS-SEM) using SmartPLS 4.0 software to analyze the proposed relationships. PLS-SEM was selected as the most appropriate analytical technique due to its robustness in handling small sample sizes, non-normal distributions, and complex model structures (Hair et al., 2014). This approach is particularly suitable for exploratory

research examining the relationships between entrepreneurial orientation dimensions, technology readiness, and digital transformation commitment in the hospitality context.

The measurement model assessment followed a two-stage approach, evaluating both convergent and discriminant validity. Convergent validity was assessed through factor loadings, composite reliability (CR), and average variance extracted (AVE), while discriminant validity was examined using the Heterotrait-Monotrait ratio (HTMT) criterion, which provides superior performance compared to traditional approaches (Henseler et al., 2014). The convergent validity results demonstrate excellent measurement properties across all constructs. All outer loadings exceeded the recommended threshold of 0.708, ranging from 0.813 to 0.913, indicating that each indicator strongly represents its respective construct. Cronbach's alpha values (CA) ranged from 0.851 to 0.909, surpassing the minimum requirement of 0.7 and suggesting high internal consistency. Composite reliability scores exceeded 0.9 for all constructs, well above the 0.7 threshold, confirming the measures' reliability. The AVE values, ranging from 0.747 to 0.790, exceeded the critical value of 0.5, indicating that each construct explains more than 50% of its indicators' variance (Fornell & Larcker, 1981).

Table 1: Convergent Validity Assessment

| Construct | Outer Loadings (Min- Max) | CA | CR | AVE |
|-----------------------------------|------------------------------|-------|-------|-------|
| Innovativeness | 0.834 - 0.913 | 0.868 | 0.921 | 0.790 |
| Proactiveness | 0.845 - 0.891 | 0.851 | 0.913 | 0.773 |
| Risk-taking | 0.822 - 0.907 | 0.863 | 0.917 | 0.781 |
| Technology Readiness | 0.813 - 0.896 | 0.887 | 0.904 | 0.747 |
| Digital Transformation Commitment | 0.856 - 0.912 | 0.909 | 0.942 | 0.790 |

Discriminant validity was confirmed through the HTMT criterion, with all values below the conservative threshold of 0.85. The highest HTMT value of 0.812 between Technology Readiness and Digital Transformation Commitment remains acceptable, confirming that all constructs are empirically distinct. These results provide strong evidence for the measurement model's validity and reliability, establishing a solid foundation for structural model assessment.

Table 2: Discriminant Validity Assessment (HTMT Criterion)

| | INN | PRO | RT | TR | DTC |
|---|-------|-------|-------|-------|-----|
| Innovativeness (INN) | - | | | | |
| Proactiveness (PRO) | 0.681 | - | | | |
| Risk-taking (RT) | 0.612 | 0.662 | - | | |
| Technology Readiness (TR) | 0.743 | 0.773 | 0.721 | - | |
| Digital Transformation Commitment (DTC) | 0.681 | 0.701 | 0.662 | 0.812 | - |

The VIF values in Table 3 for all predictor constructs ranged from 1.000 to 2.047, well below the threshold of 5.0, indicating no multicollinearity concerns. This confirms that the entrepreneurial orientation dimensions represent distinct constructs that independently contribute to technology readiness. The structural model demonstrates strong explanatory power. Technology Readiness exhibits an R² value of 0.682, indicating that the three entrepreneurial orientation dimensions collectively explain 68.2% of the variance in technology readiness. This substantial R² value suggests that innovativeness, proactiveness, and risk-taking are critical determinants of organizational technology readiness in the hospitality sector. Digital Transformation Commitment shows an R² of 0.524, demonstrating that technology readiness accounts for 52.4% of the variance in digital transformation commitment.

All hypothesized relationships received empirical support as Table 3. H1, proposing that technology readiness positively impacts digital transformation commitment, was strongly supported ($\beta = 0.724$, p < 0.001). This finding aligns with previous research suggesting that organizational readiness serves as

a crucial antecedent to successful digital transformation initiatives. The effect size ($f^2 = 1.104$) indicates a large effect, emphasizing technology readiness's pivotal role in fostering digital transformation commitment. H2, positing that innovativeness positively impacts technology readiness, was supported ($\beta = 0.287$, p < 0.001). The moderate effect size ($f^2 = 0.108$) suggests that innovative capabilities significantly contribute to building technology readiness, consistent with findings that innovative firms demonstrate enhanced capacity for identifying and exploiting digital opportunities. H3, hypothesizing that proactiveness positively impacts technology readiness, received strong support ($\beta = 0.351$, p < 0.001). With the highest path coefficient among the entrepreneurial orientation dimensions and a medium effect size ($f^2 = 0.156$), proactiveness emerges as the most influential driver of technology readiness. This finding corroborates research indicating that proactive firms' forward-looking perspectives enable superior capability in recognizing and preparing for technological opportunities. H4, proposing that risk-taking positively impacts technology readiness, was also supported ($\beta = 0.246$, p < 0.001). Despite showing the smallest effect size ($f^2 = 0.084$) among the three dimensions, risk-taking's significant contribution underscores the importance of organizational willingness to embrace uncertainty in building technology readiness.

VIF \mathbb{R}^2 O^2 **Path Coefficient** t-value Result 0.724*** 1.000 18.642 1.104 0.524 0.402 Supported 1.873 0.287*** 4.326 0.108 Supported 2.047 0.351*** 5.219 0.156 0.682 0.498 Supported

0.084

Supported

3.847

Table 3: PLS- SEM result

Note: ***p < 0.001; TR = Technology Readiness; DTC = Digital Transformation Commitment; INN = Innovativeness; PRO = Proactiveness; RT = Risk-taking

0.246***

5. Discussion

Relationship

H1: $TR \rightarrow DTC$

H2: INN \rightarrow TR

H3: PRO \rightarrow TR

1.791

H4: $RT \rightarrow TR$

The strong positive impact of technology readiness on digital transformation commitment (β = 0.724, p < 0.001) confirms the fundamental premise that organizational preparedness is critical for successful digital initiatives. This aligns with Weiner (2020)'s conceptualization of organizational readiness as being both "willing and able," encompassing both psychological and behavioral preparedness for change. Our findings empirically validate Vial (2021)'s assertion that digital transformation requires more than technological implementation—it demands comprehensive organizational commitment to change. The large effect size (f^2 = 1.104) demonstrates that technology readiness serves as a crucial foundation upon which digital transformation efforts are built, supporting Nguyen and Sharma (2024)'s argument that digital transformation demands a positive and supportive climate to facilitate technology adoption and diffusion. This relationship is consistent with Khin and Ho's (2019) findings that digital capability positively affects digital transformation outcomes, with organizations possessing higher digital capabilities demonstrating greater success in transformation initiatives.

The significant positive impact of innovativeness on technology readiness (β = 0.287, p < 0.001) supports the theoretical assertion that innovative capabilities contribute substantially to building technology readiness. This finding aligns with Khanh et al. (2025), who found that innovativeness positively relates to digital transformation, suggesting that firms with higher innovativeness levels display greater willingness to embrace digitalization processes. The moderate effect size (f^2 = 0.108) confirms Khin and Ho (2019)'s observation that digitally oriented companies demonstrate superior innovation capabilities due to their broader vision and commitment to utilizing new technologies. Our results extend Baldegger et al. (2021)'s findings that entrepreneurial orientation significantly impacts innovation and that digitization influences an organization's innovative capacity. This interconnection underscores how innovativeness creates an organizational environment conducive to technological exploration and adoption, particularly in the service-intensive hospitality context.

Proactiveness emerged as the strongest predictor of technology readiness ($\beta = 0.351$, p < 0.001),

highlighting the critical importance of forward-looking perspectives in building technological capabilities. This finding contrasts with Maseda et al. (2025)'s research, which found that proactiveness did not significantly affect digital transformation in family SMEs. This divergence may reflect the hospitality industry's distinct characteristics, where rapidly evolving customer expectations and technological innovations make proactive approaches particularly valuable. The substantial medium effect size ($f^2 = 0.156$) supports Baldegger et al. (2021)'s characterization of proactive firms as actively exploring new opportunities rather than exploiting established structures. Our findings demonstrate that in the hospitality context, proactive organizations that anticipate future market demands are better positioned to develop technological readiness, confirming Anderson et al. (2015)'s assertion that proactiveness encompasses opportunity-seeking behavior that enables organizations to anticipate and prepare for future market demands.

The positive relationship between risk-taking and technology readiness (β = 0.246, p < 0.001) corroborates findings of Polas et al. (2022) that risk-taking positively influences digital transformation. Although risk-taking showed the smallest effect size (f^2 = 0.084) among the three dimensions, its significant contribution highlights the importance of organizational willingness to embrace uncertainty in building technology readiness. This finding supports argument of Islam et al. (2022) that risk-taking propensity enables firms to pursue more entrepreneurial activities with higher levels of experiential knowledge. In the hospitality context, this translates to greater willingness to experiment with emerging technologies despite the inherent uncertainties involved. Our results align with Chen et al. (2022)'s observation that risk-prone firms are more likely to switch to digital business models, as the ability to tolerate ambiguity becomes crucial for building technological capabilities in an industry traditionally reliant on personal interactions.

6. Conclusion

6.1. Research Contribution

This study makes significant theoretical contributions to the entrepreneurial orientation, digital transformation, and hospitality management literature. First, by establishing technology readiness as a critical mediating mechanism between entrepreneurial orientation dimensions and digital transformation commitment, we extend the theoretical frameworks of both resource-based theory and dynamic capabilities theory. Our findings demonstrate that entrepreneurial orientations do not directly translate into digital transformation outcomes but require the development of technological readiness as an intermediate capability. This insight enriches the theoretical understanding of how abstract entrepreneurial mindsets materialize into concrete organizational transformations, addressing the process gap identified in previous literature. Moreover, by disaggregating entrepreneurial orientation into its constituent dimensions and examining their individual effects on technology readiness, we respond to call of Miller (2011) for more nuanced investigations of entrepreneurial orientation components. Our sector-specific focus on the hospitality industry also contributes to contextualizing entrepreneurial orientation theory, demonstrating how industry characteristics moderate the relationships between entrepreneurial dimensions and technological outcomes.

From a managerial perspective, this research provides actionable insights for hospitality industry executives navigating digital transformation initiatives. Our findings suggest that developing technology readiness should be prioritized as a strategic capability, requiring dedicated investments in both technological infrastructure and human capital development. Hospitality managers should recognize that fostering innovativeness, proactiveness, and risk-taking orientations alone is insufficient; these entrepreneurial mindsets must be channeled through systematic technology readiness development programs. This includes establishing digital literacy training programs, creating innovation labs for experimenting with emerging technologies, and developing risk assessment frameworks that balance technological experimentation with operational stability. The identification of

technology readiness as a mediating factor also implies that hospitality organizations should adopt phased approaches to digital transformation, first building foundational technological capabilities before pursuing ambitious transformation initiatives.

6.2. Limitation and Further Research

While this study provides valuable insights into the relationships between entrepreneurial orientations, technology readiness, and digital transformation commitment in the hospitality industry, several limitations should be acknowledged, which also present opportunities for future research. The crosssectional nature of our data limits our ability to establish causality definitively, and longitudinal studies tracking the evolution of technology readiness and digital transformation commitment over time would provide more robust evidence of the hypothesized relationships. Additionally, our focus on the hospitality industry, while providing sector-specific insights, may limit the generalizability of findings to other service industries or manufacturing sectors. Future research could conduct comparative studies across different industries to identify sector-specific moderating factors. The study's geographical scope may also influence results, as digital transformation adoption patterns vary across different cultural and economic contexts. Expanding the research to include multiple countries or regions would enhance the external validity of our findings. Furthermore, while we examined technology readiness as a mediating variable, other potential mediators such as organizational learning capability, digital leadership, or innovation climate could provide additional insights into the complex relationships between entrepreneurial orientation and digital transformation outcomes. Future studies might also benefit from incorporating objective measures of digital transformation success, such as operational efficiency improvements, customer satisfaction metrics, or financial performance indicators, to complement the perceptual measures of digital transformation commitment used in this research

References

Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic management journal*, *36*(10), 1579-1596. https://doi.org/10.1002/smj.2298

Baldegger, R., Wild, P., & Schueffel, P. (2021). The Effects of Entrepreneurial Orientation in a Digital and International Setting. In *Entrepreneurial Orientation:Epistemological, Theoretical, and Empirical Perspectives* (pp. 145-174). Emerald Publishing Limited. https://doi.org/10.1108/s1074-754020210000022006

Chen, J., Ghardallou, W., Comite, U., Ahmad, N., Ryu, H. B., Ariza-Montes, A., & Han, H. (2022). Managing Hospital Employees' Burnout through Transformational Leadership: The Role of Resilience, Role Clarity, and Intrinsic Motivation. *Int J Environ Res Public Health*, *19*(17), 10941. https://doi.org/10.3390/ijerph191710941

Covin, J. G., & Slevin, D. P. (2006). Strategic management of small firms in hostile and benign environments. *Strategic management journal*, 10(1), 75-87. https://doi.org/10.1002/smj.4250100107

Cuong, D. B. X., Khanh, T., Khoa, B. T., & Thanh, L. D. N. (2025). Digital Transformation and Sustainable Tourism: An Integrated Model for Heritage Destination Revisitation in the Service Innovation Era. *Journal of Service, Innovation and Sustainable Development*, 6(1), 14-28. https://doi.org/10.33168/SISD.2025.0102

Dat, N. V., Hoang, C. C., & Khoa, B. T. (2025). Bibliometric Examination of Artificial Intelligence within the Framework of E-Commerce Technology from 1996 to 2024 [Article]. *Journal of Logistics, Informatics and Service Science*, 12(2), 138-150. https://doi.org/10.33168/JLISS.2025.0209

- Dess, G. G., & Lumpkin, G. T. (2005). The Role of Entrepreneurial Orientation in Stimulating Effective Corporate Entrepreneurship. *Academy of Management Perspectives*, 19(1), 147-156. https://doi.org/10.5465/ame.2005.15841975
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of marketing research*, 18(1), 39-50. https://doi.org/10.1177/002224378101800104
- Giraldo, M., Rodriguez, O., Del Guidice, O. N., & Betts, M. M. (2024). Facilitators and hinderers for designing augmented reality for ecotourism SME's experiences: A service Design approach. *Heliyon*, 10(2), e24124. https://doi.org/10.1016/j.heliyon.2024.e24124
- Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, *102*, 102217. https://doi.org/10.1016/j.technovation.2020.102217
- Gupta, V. K., & Dutta, D. K. (2018). The Rich Legacy of Covin and Slevin (1989) and Lumpkin and Dess (1996): A Constructive Critical Analysis of Their Deep Impact on Entrepreneurial Orientation Research. In *Foundational Research in Entrepreneurship Studies* (pp. 155-177). Springer. https://doi.org/10.1007/978-3-319-73528-3 8
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2014). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. https://doi.org/10.2753/mtp1069-6679190202
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage publications, Washington DC.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of marketing Science*, 43(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8
- Hongli, M., Shuang, Z., & Tongxin, S. (2022). Moderating Effects of Supporting Factors on the Correlation between Residents' Environmental Intentions and Pro-environmental Behaviors. *Journal of Service, Innovation and Sustainable Development*, 3(1), 95-106.
- Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2022). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership. *Global Knowledge, Memory and Communication*, 73(1/2), 67-83. https://doi.org/10.1108/gkmc-02-2022-0041
- Khanh, T., Khoa, B. T., & Cuong, D. B. X. (2025). Digital Pathways to Sustainability: Empirical Evidence of Tourism Industry Transformation in the Industry 5.0 Era. *Journal of Management Changes in Digital Era*, 2, 110-119. https://doi.org/10.33168/JMCDE.2025.0108
- Khin, S., & Ho, T. C. F. (2019). Digital technology, digital capability and organizational performance. *International Journal of Innovation Science*, 11(2), 177-195. https://doi.org/10.1108/ijis-08-2018-0083
- Khoa, B. T. (2025). The Triple Helix of Digital Engagement: Unifying Technology Acceptance, Trust Signaling, and Social Contagion in Generation Z's Social Commerce Repurchase Decisions. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(2), 145. https://doi.org/10.3390/jtaer20020145
- Khoa, B. T., & Thanh, L. T. T. (2025). Consumer Privacy Concerns and Information Sharing Intention in Omnichannel Retailing: Mediating Role of Online Trust. *Pakistan Journal of Commerce and Social Sciences*, 19(1), 55-76.
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466. https://doi.org/10.1016/j.ijinfomgt.2021.102466

Lomberg, C., Urbig, D., Stöckmann, C., Marino, L. D., & Dickson, P. H. (2017). Entrepreneurial Orientation: The Dimensions' Shared Effects in Explaining Firm Performance. *Entrepreneurship theory and practice*, 41(6), 973-998. https://doi.org/10.1111/etap.12237

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21(1), 135-172. https://doi.org/10.2307/258632

Lumpkin, J. R., & Dunn, M. G. (2011). Perceived Risk As A Factor In Store Choice: An Examination Of Inherent Versus Handled Risk. *Journal of Applied Business Research (JABR)*, 6(2), 104-118. https://doi.org/10.19030/jabr.v6i2.6311

Maseda, A., Iturralde, T., & Arzubiaga, U. (2025). Unpacking the role of entrepreneurial orientation in the digital transformation of family SMEs: The importance of leadership structure and generational involvement. *Technological Forecasting and Social Change*, 219, 124248. https://doi.org/10.1016/j.techfore.2025.124248

Miller, D. (2011). Miller (1983) Revisited: A Reflection on EO Research and Some Suggestions for the Future. *Entrepreneurship theory and practice*, 35(5), 873-894. https://doi.org/10.1111/j.1540-6520.2011.00457.x

Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic management journal*, *3*(1), 1-25.

Mountije, Y., Agapito, D., & Ramos, C. (2025). Reshaping the future of tourism & hospitality industry through blockchain technology: a systematic literature review. *Information Technology & Tourism*, 1-27. https://doi.org/10.1007/s40558-024-00306-y

Nguyen, M., & Sharma, P. (2024). Interactive impact of transformational leadership and organizational innovation on online knowledge sharing: a knowledge management perspective. *Journal of knowledge management*, 28(4), 1164-1182. https://doi.org/10.1108/jkm-09-2022-0758

Ojeme, M., Kirkbeşoğlu, E., & Dogan, B. (2019). The Role of Uncertainty Avoidance and Situational Abnormality in the Satisfaction-Trust-Loyalty Link. *Journal of Relationship Marketing*, *18*(4), 324-349. https://doi.org/10.1080/15332667.2019.1648939

Polas, M. R. H., Afshar Jahanshahi, A., Kabir, A. I., Sohel-Uz-Zaman, A. S. M., Osman, A. R., & Karim, R. (2022). Artificial Intelligence, Blockchain Technology, and Risk-Taking Behavior in the 4.0IR Metaverse Era: Evidence from Bangladesh-Based SMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 168. https://doi.org/10.3390/joitmc8030168

Rauch, A., Fink, M., & Hatak, I. (2018). Stress Processes: An Essential Ingredient in the Entrepreneurial Process. *Academy of Management Perspectives*, 32(3), 340-357. https://doi.org/10.5465/amp.2016.0184

Rupeika-Apoga, R., Petrovska, K., & Bule, L. (2022). The Effect of Digital Orientation and Digital Capability on Digital Transformation of SMEs during the COVID-19 Pandemic. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(2), 669-685. https://doi.org/10.3390/jtaer17020035

Satar, M. S., Alshibani, S. M., & Alarifi, G. (2025). Effects of Firm-Level Entrepreneurship Orientation on Digital Transformation in SMEs: The Moderating Role of Strategic Agility. *Entrepreneurship Research Journal*, 15(1), 91-124. https://doi.org/10.1515/erj-2023-0267

Tran, A. V., & Khoa, B. T. (2025). The Impact of Mobile Augmented Reality on Green Experience and Destination Choice Intention in Green Tourism in Vietnam. *GeoJournal of Tourism and Geosites*, 58(1), 136-145. https://doi.org/10.30892/gtg.58112-1397

Uyen, V. T. T., Ly, N. M., Oanh, N. T. T., & Khoa, B. T. (2025). Decoding Fear of Missing Out in Social Commerce: A Novel Integration of TAM and TRA for Online Purchasing Behavior. *Journal of Logistics, Informatics and Service Science*, 12(3), 50-62. https://doi.org/10.33168/JLISS.2025.0304

Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66. https://doi.org/10.4324/9781003008637-4

Wales, W. J., Kraus, S., Filser, M., Stöckmann, C., & Covin, J. G. (2021). The status quo of research on entrepreneurial orientation: Conversational landmarks and theoretical scaffolding. *Journal of Business Research*, 128, 564-577. https://doi.org/10.1016/j.jbusres.2020.10.046

Weiner, B. J. (2020). A theory of organizational readiness for change. In *Handbook on Implementation Science* (pp. 215-232). Edward Elgar Publishing. https://doi.org/10.4337/9781788975995.00015