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Adoption Without Engagement? Unpacking the Impact of Innovation Characteristics, Risk, and Trust on Destination Digital Payment Performance

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Abstract

The acceleration of digital transformation has restructured the global tourism industry, making digital payment systems central to seamless travel experiences. However, a notable paradox persists: "adoption without engagement," in which tourists register for digital payment services but revert to cash at their destination. This study aims to extend the Diffusion of Innovations (DOI) framework by integrating perceived risk and trust to evaluate their combined impact on the intention to adopt digital payments and on subsequent experiential performance at the destination. Using a quantitative explanatory research design, data were collected from 400 tourists in Indonesia and analyzed via Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that Relative Advantage, Trust, and Compatibility have significant positive effects on the intention to adopt digital payments, while Perceived Risk acts as a substantial negative anchor. Notably, Complexity and Trialability did not significantly influence intention, likely because the sampled younger demographics had high digital literacy. Furthermore, intention to adopt serves as a vital bridge, significantly influencing the destination's holistic experiential performance. The results suggest that overcoming the engagement gap requires destination management organizations and fintech providers to prioritize risk mitigation and high-value propositions over mere technical ease of use.

Keywords: *Digital Payments, Diffusion of Innovations, Perceived Risk, Trust, Destination Experiential Performance*

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INTRODUCTION

The acceleration of digital transformation has fundamentally restructured the operational architecture of the global tourism industry. Digital payment systems, particularly e-wallets, have transitioned from optional conveniences to central mechanisms that facilitate seamless travel experiences (Prawira et al., 2022; Susanto et al., 2022). This shift is characterized by a growing reliance on contactless transactions, driven by broader technology integration in destination management and the need for operational efficiency (Gutierriz et al., 2025). While the initial uptake of these platforms in developing economies shows robust growth, a notable paradox persists: adoption without engagement. In this scenario, tourists register for digital payment services but revert to traditional cash transactions at the destination, limiting the potential of smart tourism ecosystems.

In the context of this study, 'engagement' is defined not merely as the frequency of application usage or feature exploration, but as the sustained substitution of cash transactions with digital payment alternatives throughout the tourist journey. Consequently, digital payment interfaces must be conceptualized as 'experiential assets.' These assets are expected to integrate seamlessly into the travel process, transforming basic financial interactions into components of a broader, frictionless travel ecosystem.

Traditionally, the Diffusion of Innovation (DOI) theory has been employed to decode the early stages of technology acceptance, focusing on attributes such as relative advantage, compatibility, complexity, and trialability (Rogers, 1962). These characteristics remain instrumental in reducing initial resistance to innovation among tourists (Zhan et al., 2025). However, in digitally mature environments, the theoretical capacity of DOI to explain sustained engagement appears constrained. Recent studies indicate that while factors such as perceived convenience and economic cost significantly drive the initial decision to adopt sustainable mobility and digital solutions, they do not inherently guarantee continued use (Lasisi et al., 2025). This suggests that the established dimensions of innovation diffusion must be augmented to address the complexities of tourist behaviour in physical destination settings.

The gap between intention and sustained behaviour necessitates a deeper examination of the psychological and environmental factors unique to tourism. Trust emerges as a critical mediator in this context. The intention to utilize digital travel platforms is significantly influenced by the quality and consistency of information, with trust acting as the conduit between external stimuli and adoption intention (Ghosh et al., 2026). Concurrently, the perception of risk—encompassing data security and transaction reliability in unfamiliar destinations—acts as a persistent barrier to sustained digital engagement. Furthermore, psychological variables, including consumer confidence in the digital era and the fear of missing out, have been identified as vital predictors shaping the trajectory of digital currency adoption (Han et al., 2025).

Crucially, the ultimate objective of integrating digital payments in tourism extends beyond mere transactional efficiency; it is fundamentally linked to the overall quality of the tourist experience. Aligning digital marketing and technological strategies with tourist expectations is essential to enhancing satisfaction and building long-term destination resilience (Tichaawa & Chamboko-Mpotaringa, 2025). Moreover, the destination experiential performance is highly sensitive to technological friction. Negative encounters, such as technological failures or complex interfaces, often leave a stronger imprint on tourists' memories than positive experiences, thereby undermining the perceived value of the destination (H. Ju et al., 2025). Effective integration requires strategies that foster emotional engagement and brand trust, leading to deeper commitment from tourists (Alhomaid, 2025).

Addressing the adoption without engagement paradox requires a multifaceted approach. This study aims to extend the DOI framework by integrating perceived risk and trust to evaluate their combined impact on both the intention to adopt digital payments and subsequent experiential performance at the destination. By analyzing these variables in the context of tourism destinations, this research seeks to clarify why high adoption rates often fail to translate into active, sustained use, thereby providing strategic insights for destination management organizations and fintech providers.

LITERATURE REVIEW

The Adoption Without Engagement Paradox in Smart Tourism Destinations

The pursuit of digital transformation within the tourism sector is widely recognized as a positive driver for economic development and business growth (Gutierriz et al., 2025). However, a significant disconnect persists between initial adoption of digital tools and their meaningful, long-term use at the destination level. This adoption-without-engagement paradox is

increasingly prevalent in smart tourism ecosystems, where travelers may register for digital payment platforms or travel apps but revert to traditional habits during their journey. Recent empirical evidence suggests that adoption is not a simple linear process; rather, it is a context-dependent construct influenced by platform orchestration and travelers' bounded rationality (Lasisi et al., 2025). Consequently, high registration figures often mask a lack of active participation, as usage behavior is dictated by how well the digital ecosystem aligns with real-time situational needs.

A primary cause of this engagement gap is the misalignment between digital marketing strategies and tourists' actual expectations (Chamboko- Mpotaringa et al., 2025). When technological tools are not tourist-centric or fail to build resilience within the destination's infrastructure, they are often abandoned after the initial trial phase. Furthermore, the psychological structures underpinning technology adoption involve complex decision-making phases that are frequently influenced by external factors such as the fear of missing out or varying levels of confidence in digitalized environments rather than purely functional utility (Han et al., 2025). This suggests that tourists may adopt a technology driven by social trends but lack the intrinsic motivation to engage with it consistently.

The disproportionate impact of technological friction and negative encounters further exacerbates the paradox. In the hospitality and tourism sector, negative memories—stemming from safety concerns, hygiene issues, or technological failures—tend to have a more profound and lasting effect on consumer behavior than positive experiences (H. Ju et al., 2025). If a digital payment interface proves unreliable or complex during a critical travel moment, the resulting negative memory can permanently stifle engagement, regardless of the app's initial perceived benefits. To mitigate this, organizations must move beyond cognitive appeals and foster deeper emotional engagement and brand trust, particularly through sustainability-focused marketing that aligns with the traveler's personal values (Alhomaid, 2025). Ultimately, overcoming this paradox requires a trustworthy user experience and high-quality information to bridge the gap between initial interest and sustained participation (Ghosh et al., 2026).

Extending Diffusion of Innovation (DOI) in the Digital Tourism Ecosystem

The application of Diffusion of Innovation (DOI) theory within tourism has undergone a paradigm shift, transitioning from a static analysis of technology traits to a dynamic exploration of open-innovation ecosystems. While traditional models focus on the inherent qualities of an innovation, contemporary research underscores that digital transformation is a positive force only when applied holistically across tourism businesses and the wider economy (Gutierriz et al., 2025). This section re-examines the five core attributes of DOI—relative advantage, compatibility, complexity, and trialability—through the lens of recent empirical findings in destination digitalization. In the context of digital mobility, relative advantage is no longer merely about speed; it is intricately tied to perceived convenience and to signaling economic costs. Recent evidence from PLS-SEM analysis indicates that economic costs can serve as a reliability signal, paradoxically enhancing travelers' perceptions of convenience (Lasisi et al., 2025). Furthermore, for emerging technologies such as the Metaverse, relative advantage acts as a critical mitigator of innovation resistance, provided that the virtual experience offers clear benefits over traditional leisure methods (Zhan et al., 2025). This suggests that the advantage must be perceived as both functional and experiential to trigger adoption.

Compatibility involves the degree to which an innovation fits the values and lifestyles of the target user (Rogers, 1962). In modern destination management, this necessitates aligning digital marketing strategies with the specific needs and expectations of domestic tourists to ensure satisfaction (Chamboko- Mpotaringa et al., 2025). Moreover, a significant tension exists between individual sustainability values and convenience; while awareness of sustainable options fosters adoption, personal values may occasionally reduce the perceived convenience of the technology

itself (Lasisi et al., 2025). Therefore, compatibility must be viewed as a multidimensional construct that balances ethical values with daily digital habits.

Complexity remains a formidable barrier, particularly when technological failures or safety concerns generate negative memories that deter future use (H. Ju et al., 2025). Conversely, trialability—the ability to experiment with a system—significantly reduces these innovation barriers, especially among younger cohorts like Generation Z (Zhan et al., 2025). The adoption process for complex financial innovations, such as central bank digital money, is also moderated by psychological factors, including fear of missing out (FOMO) and the traveler's overall confidence in the digital era (Han et al., 2025). These findings imply that reducing complexity is not just a design task but a psychological one.

The ultimate utility of DOIs in tourism is their ability to foster deeper commitment. For digital payment systems to transcend the adoption without engagement trap, they must foster brand engagement and green brand trust (Alhomaid, 2025). High-quality, consistent information—delivered via electronic word of mouth (eWOM)—is essential to building the trust necessary for sustained adoption of online travel services (Ghosh et al., 2026). Thus, while DOI explains the initial diffusion, the quality of the user experience and emotional attachment determine whether the technology is integrated into the destination's long-term experiential performance (Alhomaid, 2025; Han et al., 2025).

The Mitigating and Aggravating Roles of Trust and Perceived Risk

A delicate equilibrium between perceived threats and relational anchors defines the psychological landscape of digital adoption in tourism. Perceived risk remains a primary deterrent to the diffusion of novel technologies, often manifesting as functional, privacy, or security barriers that stifle the acceptance of innovation (Zhan et al., 2025). These anxieties are frequently amplified in tourism settings, where negative memories associated with technological friction or uncertain environments leave a more lasting imprint on behavioral intentions than positive encounters (H. Ju et al., 2025). Consequently, the mere presence of advanced payment systems does not guarantee usage if travelers perceive a significant threat to their financial or data security.

Conversely, trust acts as the quintessential mechanism for mitigating these perceived risks and fostering technology uptake. In the domain of online travel services, trust serves as a critical mediator, converting the quality and consistency of digital information into concrete adoption intentions (Ghosh et al., 2026). This relational bond is further strengthened when digital platforms foster emotional engagement, particularly through sustainability-focused strategies that build green brand trust (Alhomaid, 2025). Without this foundation, even technologically superior innovations fail to achieve sustained engagement.

The trajectory of adoption is also heavily influenced by the traveler's psychological readiness and the broader digital context. Factors such as the 'fear of missing out' (FOMO) and the level of confidence in the digitalized era play instrumental roles in determining whether a tourist embraces or resists financial innovations (Han et al., 2025). Furthermore, perceptions of reliability in these systems are often tied to economic signals; for instance, economic costs can paradoxically enhance trust by serving as a proxy for service quality and convenience (Lasisi et al., 2025). Ultimately, the successful integration of digital payments requires a strategic alignment of marketing tools with tourist expectations, ensuring that the technology builds resilience rather than friction within the destination ecosystem (Tichaawa & Chamboko-Mpotaringa, 2025). Such a holistic application of digital transformation is what ultimately drives positive outcomes for the wider tourism economy (Gutierriz et al., 2025).

Destination Experiential Performance and Sustained Engagement

Drawing upon the Experience Economy (Gilmore & Pine, 1998), digital payment systems function as experiential assets rather than mere transactional utilities. Destination experiential performance relies heavily on frictionless travel, where administrative and financial procedures operate seamlessly in the background. When technological friction occurs—such as a failed transaction due to network instability or application errors—it generates pronounced negative memories. Psychological responses to service failures in unfamiliar destination environments disproportionately outweigh the technology's functional gains. A single critical failure can degrade the overall experiential value, establishing a persistent barrier to future usage.

The overarching goal of implementing digital innovations within tourism goes beyond facilitating mere transactions; it aims to optimize the holistic quality of the traveler's journey, conceptualized here as destination experiential performance. Digital transformation, when strategically applied, acts as a positive force that enhances the operational capabilities of tourism businesses and contributes to the wider economic development of a destination (Gutierriz et al., 2025). However, this performance is highly contingent upon the seamless integration of technology into the physical environment. Experiential performance is particularly vulnerable to disruptions, as negative incidents—such as hygiene concerns or technological failures—exert a disproportionately strong influence on tourists' memories and subsequent brand image evaluations (D. Ju et al., 2024). Therefore, the successful adoption of digital payment systems is a critical component in mitigating negative encounters and ensuring a frictionless travel experience.

To achieve sustained engagement and high experiential performance, digital strategies must be fundamentally tourist-centric. Destination marketers must align their digital tools with the specific motivations and expectations of domestic travelers (Chamboko- Mpotaringa et al., 2025). This alignment builds resilience within the tourism industry and fosters long-term sustainability by ensuring that the technology is actually utilized rather than merely installed. Furthermore, the experiential value deepens when technological tools resonate with the user's ethical and environmental values. For instance, integrating sustainable mobility options into digital platforms requires understanding how individual sustainability values intersect with perceived convenience and economic costs (Lasisi et al., 2025).

Ultimately, destination experiential performance is driven by the emotional and cognitive bonds formed between the tourist and the destination's digital infrastructure. Strategies that prioritize brand engagement and green brand trust are essential for transforming initial adoption intentions into responsible, committed consumer behavior (Alhomaid, 2025). This deeper level of commitment is what separates successful digital ecosystems from those suffering from the adoption without engagement paradox. Furthermore, the sustained use of travel platforms is heavily reliant on the quality and consistency of the information provided, underscoring the need for trustworthy user experiences to promote sustainable adoption (Ghosh et al., 2026). Even the adoption of complex financial technologies, such as digital currencies, requires a deep understanding of consumer attachment and confidence in the digital era to ensure meaningful integration into the travel experience (Han et al., 2025).

Hypotheses Development and Conceptual Model

The proposed conceptual model integrates the core tenets of Diffusion of Innovation (DOI) theory with risk-trust dynamics to predict digital payment adoption and its subsequent impact on the tourist experience. The decision to adopt a technological innovation in a destination setting is initially driven by its perceived functional attributes. A digital tool must demonstrate clear utility—such as time efficiency or economic incentives—to overcome traditional habits. Recent findings indicate that economic costs can paradoxically signal reliability, thereby enhancing the perceived convenience and adoption of sustainable options (Lasisi et al., 2025).

Furthermore, in emerging ecosystems such as the Metaverse and advanced digital wallets, attributes such as relative advantage, compatibility, and trialability are crucial for mitigating innovation resistance among tourists. When digital tools align with the traveler's lifestyle and offer risk-free trial periods, the barriers to entry are significantly lowered. Conversely, high complexity or technological friction remains a primary deterrent to the intention to use (Zhan et al., 2025).

Beyond functional characteristics, psychological evaluations of risk and trust are paramount. Perceived risk—encompassing data privacy concerns and transaction failures in unfamiliar environments—acts as a substantial barrier that negatively influences behavioral intentions, often leading to lasting negative memories (D. Ju et al., 2024). In contrast, trust serves as a critical mediator that facilitates adoption. The intention to use digital platforms is heavily dependent on the consistency of information and the trust it generates among users (Ghosh et al., 2026). Trust is further solidified when digital marketing strategies successfully build brand engagement, leading to deeper consumer commitment (Alhomaid, 2025). Additionally, consumer confidence in the digital era directly predicts the adoption of complex financial technologies (Han et al., 2025).

The ultimate measure of a smart destination's success is not just the uptake of technology, but its contribution to the holistic tourist experience. Digital transformation acts as a positive force, enhancing tourism business operations and the wider economy (Gutierriz et al., 2025). However, this transformation must be aligned with the needs and expectations of sustainable tourists to build resilience and long-term satisfaction (Tichaawa & Chamboko-Mpotaringa, 2025). When tourists intend to use reliable digital payment systems and subsequently engage with them, it reduces the likelihood of negative technological encounters and enhances their overall evaluation of the destination. Consequently, the intention to adopt serves as a vital bridge between innovation characteristics and experiential outcomes. Therefore, this study posits:

H1: Relative Advantage has a significant positive effect on the Intention to Adopt Digital Payments.

H2: Compatibility has a significant positive effect on the Intention to Adopt Digital Payments.

H3: Complexity has a significant negative effect on the Intention to Adopt Digital Payments.

H4: Trialability has a significant positive effect on the Intention to Adopt Digital Payments.

H5: Perceived Risk has a significant negative effect on the Intention to Adopt Digital Payments.

H6: Trust has a significant positive effect on the Intention to Adopt Digital Payments.

H7: Intention to Adopt Digital Payments positively mediates the relationship between DOI Characteristics, Risk, Trust, and Destination Experiential Performance.

H8: Intention to adopt digital payments has a significant positive effect on destination experiential performance.

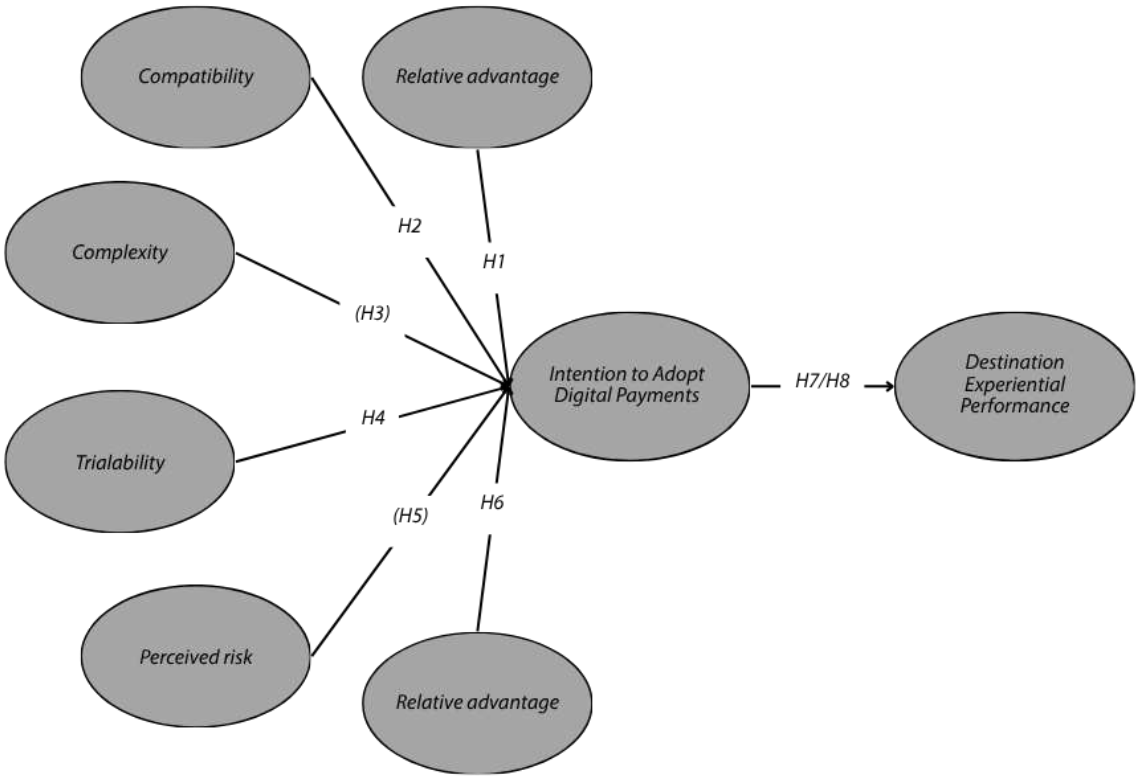

Figure 1. Proposed Conceptual Model
Source: Research data, 2026

METHODS

Research Design and Approach

This study employs a quantitative explanatory research design to examine the causal relationships between innovation characteristics, psychological barriers, and experiential outcomes. Given the complexity of the proposed model—which involves multiple independent variables and a mediating path—the research uses a cross-sectional design to collect data within a specific timeframe (Hair et al., 2021). The methodology is designed to move beyond descriptive analysis, focusing instead on the structural pathways that lead from initial digital payment adoption to holistic destination performance.

Population, Sampling, and Unit of Analysis

The target population comprises domestic and international tourists who have visited major tourism destinations in Indonesia and utilized digital payment platforms during their stay. Sampling Technique: Purposive sampling is used to ensure respondents have the necessary experience to provide relevant data. Inclusion Criteria: Participants must have conducted at least 2 digital transactions (e.g., e-wallet, QRIS, or mobile banking) within a tourism destination during their last visit to ensure recent and accurate recall of the experience. Sample Size: Following the guidelines for structural equation modelling, the study targets a minimum of 200-400 respondents to ensure sufficient statistical power and model stability (Hair et al., 2021). The adequacy of the sample size was validated a priori using G*Power software. Assuming a medium effect size ($f^2 = 0.15$), an alpha level of 0.05, and a required statistical power of 0.95 for a structural model comprising six predictors, the minimum required sample size was calculated at 146. The final sample of 400, which was acquired, significantly exceeds this theoretical threshold, ensuring robust statistical power and high precision for the PLS-SEM estimations.

Operationalization of Variables

The survey instrument was developed by adapting validated scales from established literature and recent empirical studies: Diffusion of Innovation (X1-X4): Measured through indicators of relative advantage, compatibility, complexity, and trialability, focusing on the convenience-first design and economic cost signaling as identified in recent tourism mobility research (Lasisi et al., 2025; Zhan et al., 2025). Perceived Risk (X5): Operationalized through dimensions of financial safety, data privacy, and system reliability, reflecting the innovation barriers commonly encountered in virtual and digital tourism environments (H. Ju et al., 2025; Zhan et al., 2025). Trust (X6): Based on cognitive and emotional dimensions, including brand engagement and the consistency of information provided by the platform (Alhomaid, 2025; Ghosh et al., 2026). Intention to Adopt (M): Evaluates the psychological readiness and likelihood of continued usage of digital payment systems in future travels (Han et al., 2025). Destination Experiential Performance (Y): Assessed through the lens of satisfaction, emotional engagement, and the absence of negative technological friction during the visit (Chamboko- Mpotaringa et al., 2025; H. Ju et al., 2025).

Data Collection Procedures

Primary data is gathered through self-administered online questionnaires. The instrument uses a five-point Likert scale, ranging from Strongly Disagree to Strongly Agree. To minimize common method bias, the survey includes clear instructions, ensures respondent anonymity, and employs varied scale anchors. A pilot study is conducted prior to full distribution to verify the clarity of items and the internal consistency of the scales.

Data Analysis Technique (PLS-SEM)

Data analysis is performed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is particularly suited for complex models with mediating variables and non-normal data distributions. The analysis proceeds in two stages: 1) Measurement Model Evaluation (Outer Model): Testing for indicator reliability, internal consistency (Cronbach's Alpha and Composite Reliability), and validity (Convergent Validity via AVE and Discriminant Validity via HTMT criteria); and 2) Structural Model Evaluation (Inner Model): Assessing the significance of path coefficients (β), the coefficient of determination (R^2), and predictive relevance (Q^2). Mediation effects are tested using bootstrapping to assess the significance of indirect paths from innovation characteristics and psychological factors to experiential performance.

RESULTS AND DISCUSSION

Respondent Profiles

This section outlines the demographic and psychographic characteristics of the 400 respondents who participated in this study. The data highlights a balanced distribution across various socio-economic segments, providing a robust representative sample of domestic tourists in Indonesia.

Table 5. Profile of Respondents

Category	Group	Frequency	Percentage (%)
Gender	Female	202	52.33%
	Male	184	47.67%
Age	18–25 years (Gen Z)	142	35.50%
	26–35 years (Millennials)	154	38.50%
	36–45 years	70	17.50%
	>45 years	34	8.50%
Education	Secondary (SMA)	109	27.25%

Category	Group	Frequency	Percentage (%)
	Diploma (D1-D4)	84	21.00%
	Bachelor (S1)	102	25.50%
	Postgraduate (S2/S3)	105	26.25%
Monthly Income	< IDR 5 Million	105	26.25%
	IDR 5 – 10 Million	92	23.00%
	IDR 10 – 20 Million	101	25.25%
	> IDR 20 Million	102	25.50%
Profession	Private Employee	108	27.00%
	Entrepreneur	103	25.75%
	Government (ASN)	98	24.50%
	Student	91	22.75%
Travel Frequency	Low (1–2 times/year)	118	29.50%
	Moderate (3–5 times/year)	149	37.25%
	High (>5 times/year)	133	33.25%
Payment Preference	Mobile Banking	138	35.57%
	E-Wallet	133	34.28%
	Cash/Other	117	30.15%

Source: Research data, 2026

The survey results indicate a slight majority of female respondents (52.33%) compared to males (47.67%). In terms of age, the sample is dominated by younger demographics, specifically those aged 26–35 (38.5%) and 18–25 (35.5%). This tech-savvy cohort, representing over 70% of the sample, aligns with the research's digital nature, as they are typically early adopters of fintech solutions. Interestingly, the educational backgrounds are highly diverse; more than half of the respondents (51.75%) hold either a Bachelor's or a Postgraduate degree, suggesting a high level of academic literacy among the participants.

Economically, the sample is evenly distributed across four income tiers. Approximately 50.75% of respondents earn more than IDR 10 million per month, positioning them as mid- to high-income travelers with significant purchasing power. Professionally, the participants are largely active in the formal sector, with private employees (27%) and entrepreneurs (25.75%) forming the core of the group. The presence of government officials (24.5%) and students (22.75%) further ensures that the findings reflect a wide spectrum of the Indonesian workforce.

The psychographic data reveal an active traveling population, with 70.5% of respondents visiting tourism destinations at least three times a year. Regarding digital payment preferences, Mobile Banking (35.57%) and E-Wallets (34.28%) are the primary choices, collectively accounting for nearly 70% of transactions. This high digital preference confirms the maturity of the digital payment ecosystem among the sample, though a notable 30.15% still maintain cash or alternative preferences, highlighting the persistence of traditional methods even in a digitally literate population.

Measurement Model Evaluation

The preliminary phase of the structural analysis involves validating the reflective measurement model to ensure that each latent construct is accurately represented by its indicators. This evaluation follows the rigorous standards of PLS-SEM, focusing on indicator reliability, internal consistency, convergent validity, and discriminant validity. Indicator reliability is assessed using outer loadings; values should ideally exceed 0.708 to ensure the construct explains more than 50% of the indicator's variance. As shown in Table 6, all loadings in this study range from 0.870 to 0.924, indicating exceptional reliability. These results suggest that the selected items are highly effective in capturing the nuances of digital payment adoption in tourism settings.

Table 6. Reflective Indicators and Outer Loadings

Construct	Code	Reflective Measurement Statement	Loading
Relative Advantage	RA1	Using digital payments makes my travel transactions more efficient.	0.918
	RA2	Digital payments provide better financial benefits than cash.	0.907
	RA3	The use of e-wallets enhances the overall convenience of my trip.	0.922
	RA4	Digital payments allow for faster access to tourism services and tickets.	0.918
Compatibility	CO1	Digital payment usage fits well with my existing digital lifestyle.	0.912
	CO2	Using digital platforms is consistent with how I manage my finances.	0.921
	CO3	Digital payments are compatible with the mobile nature of my travel.	0.892
	CO4	These payment methods align with my personal values regarding technology.	0.905
Complexity	CX1	The digital payment interface at the destination is easy to understand.	0.918
	CX2	Learning to use the payment application required very little effort.	0.894
	CX3	I find the transaction process to be straightforward and clear.	0.878
	CX4	The system does not require complex technical knowledge to operate.	0.923
Trialability	TR1	I had the opportunity to try the digital payment before full adoption.	0.914
	TR2	The platform allowed me to test its features without any financial risk.	0.916
	TR3	The provider's initial simulations were helpful to me.	0.906
	TR4	I could easily explore the app's functions during my first visit.	0.914
Perceived Risk	PR1	I worry about the security of my personal data during transactions.	0.918
	PR2	There is a risk of financial loss due to system errors at the destination.	0.903
	PR3	I am concerned about the privacy of my transaction history.	0.914
	PR4	Unreliable internet at the destination makes me doubt the system.	0.924
Trust	TS1	I believe the digital payment provider is honest and reliable.	0.914
	TS2	The platform has a good reputation among fellow travellers.	0.912
	TS3	Information regarding transaction status is always consistent.	0.904
	TS4	I trust the system to securely handle my funds throughout my journey.	0.915
Intention to Adopt	IT1	I plan to continue using digital payments for future travel.	0.887
	IT2	I am likely to recommend digital payments to other travellers.	0.900
	IT3	I will prioritize destinations that support contactless payments.	0.896
	IT4	Using digital payments is my first choice when visiting new places.	0.870
Experiential Performance	DEP1	My experience with digital payments added to my travel satisfaction.	0.878
	DEP2	The frictionless payment process created positive travel memories.	0.890
	DEP3	I felt an emotional bond with the destination's modern infrastructure.	0.892
	DEP4	The lack of payment friction enhanced my overall trip performance.	0.889

Source: Research data, 2026

Internal consistency was evaluated using Cronbach's Alpha and Composite Reliability (CR). As detailed in the statistical summary, all constructs achieved Alpha values above 0.91 and CR values above 0.93, far exceeding the 0.70 benchmark. Furthermore, the Average Variance Extracted (AVE) for all constructs ranged from 0.787 to 0.839, satisfying the requirement of AVE > 0.50. This confirms that the measurement model has strong convergent validity, with the constructs explaining a substantial portion of the variance in their indicators.

Discriminant validity was verified using the Heterotrait-Monotrait (HTMT) ratio, which is considered more sensitive than the traditional Fornell-Larcker criterion. All HTMT ratios remained below the 0.85 threshold, with the highest correlation observed between Intention to Adopt and Destination Experiential Performance at 0.792. These results indicate that each construct in the model is empirically distinct from the others, thereby preventing conceptual overlap.

To assess potential bias in the measurement model, the outer VIFs were examined. All indicators showed VIF scores ranging from 2.457 to 3.788. While some values slightly exceed the conservative 3.0 threshold, they remain well below the critical 5.0 level, indicating that multicollinearity does not pose a significant threat to the model's integrity. Finally, the SRMR (Standardised Root Mean Square Residual) for the saturated model was 0.029, and the NFI

(Normed Fit Index) was 0.923, both indicating a good fit between the proposed model and the empirical data.

Structural Model Evaluation

After establishing the validity and reliability of the measurement model, the structural model was evaluated to test the hypothesized relationships. This stage involves assessing the collinearity among constructs, the explanatory power (R^2), predictive relevance (Q^2), and the significance of the path coefficients (β). Before examining the hypotheses, the inner Variance Inflation Factor (VIF) values were scrutinized to ensure the absence of multicollinearity. All inner VIF values range from 1.121 to 1.654, well below the conservative threshold of 3.0, indicating that the structural results are not biased by redundant predictors.

The model demonstrates substantial explanatory power, with an R^2 of 0.575 for Intention to Adopt Digital Payments, meaning the antecedents explain 57.5% of the variance in tourist intentions. Furthermore, Destination Experiential Performance yields an R^2 of 0.520, suggesting that over half of the variance in destination experience quality is accounted for by adoption intention. The predictive relevance (Q^2) for both endogenous constructs is considerably above zero (0.446 for intention and 0.405 for performance), confirming the model's high predictive capacity within the tourism ecosystem. The evaluation of direct effects, as detailed in Table 7, indicates that five of the seven direct hypotheses are supported.

Table 7. Path Coefficients and Direct Hypotheses Testing

H	Path	β	T Statistics	P Values	Decision
H1	Relative Advantage → Intention	0.397	9.099	0.000	Supported
H2	Compatibility → Intention	0.130	3.464	0.001	Supported
H3	Complexity → Intention	0.024	0.599	0.549	Not Supported
H4	Trialability → Intention	0.042	1.054	0.292	Not Supported
H5	Perceived Risk → Intention	-0.315	9.191	0.000	Supported
H6	Trust → Intention	0.269	6.841	0.000	Supported
H8	Intention → Performance	0.721	29.510	0.000	Supported

Source: Research data, 2026

Relative Advantage (H1) emerges as the strongest positive predictor of intention (β = 0.397, $p < 0.001$), followed by Trust (H6) (β = 0.269) and Compatibility (H2) (β = 0.130). Conversely, Perceived Risk (H5) exerts a substantial negative influence (β = -0.315, $p < 0.001$), acting as a significant anchor that hinders the digital journey despite the perceived benefits. Notably, Complexity (H3) and Trialability (H4) do not significantly influence intention, likely because the respondents' profiles indicate high digital literacy. Finally, Intention to Adopt shows a powerful direct effect on Destination Experiential Performance (H8) (β = 0.721), confirming that intentional digital engagement is a primary driver of a positive destination experience.

To address the Adoption without Engagement paradox, the study examined the indirect pathways through which innovation characteristics and psychological factors influence experiential performance.

Table 8. Specific Indirect Effects (Mediation)

Path	β (Indirect)	T Statistics	P Values	Decision
RA → Intention → Performance	0.287	8.849	0.000	Supported
Risk → Intention → Performance	-0.227	8.325	0.000	Supported
Trust → Intention → Performance	0.194	6.591	0.000	Supported
Compatibility → Intention → Performance	0.093	3.443	0.001	Supported

Source: Research data, 2026

The results indicate that Intention to Adopt successfully mediates the relationship between four key antecedents and the quality of the destination experience (H7). Specifically, the indirect effects of Relative Advantage (β = 0.287) and Trust (β = 0.194) indicate that digital tools enhance travel memories only when there is a clear intention to use them. However, the significant negative indirect effect of Perceived Risk (β = -0.227) indicates that security concerns erode experiential value before the traveller reaches the destination. This confirms that a mental evaluation of risk versus trust gates the transition from adoption to engagement.

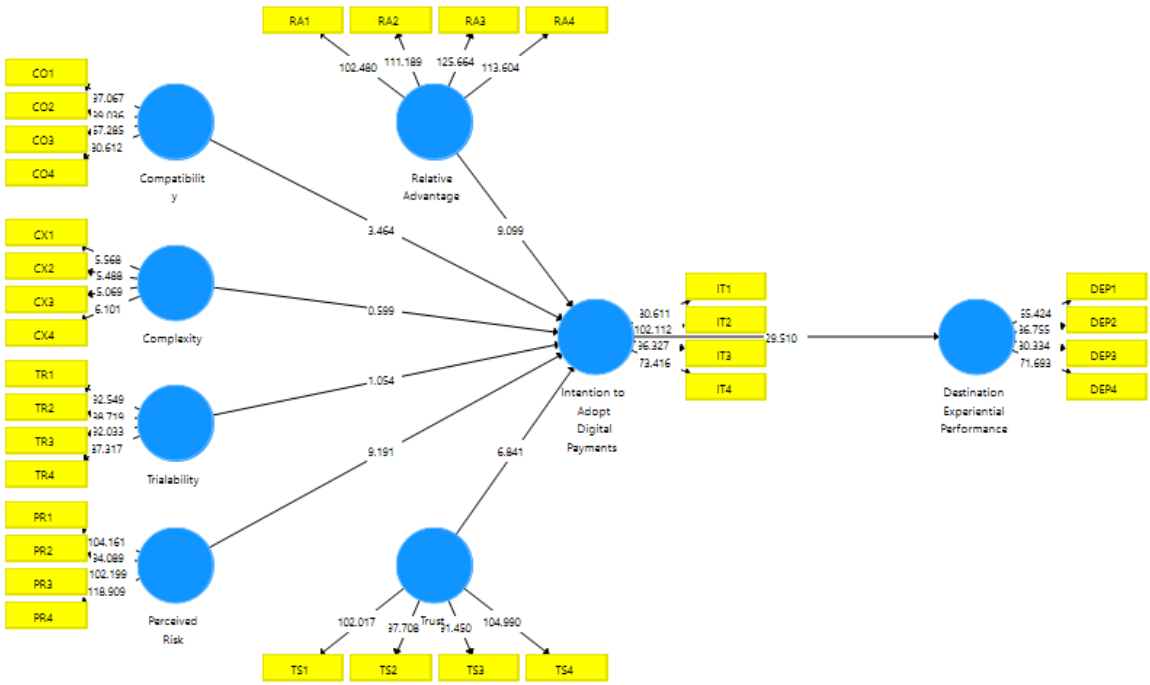

Figure 2. Evaluated Structural Model
Source: Research data, 2026

Discussion

The empirical evidence derived from this study provides a nuanced explanation of the adoption without engagement paradox within the digital tourism landscape. While technological uptake is high, the transition to active, sustained utilization is governed by a complex interplay of functional utility, psychological anchors, and perceived destination readiness. The significant positive influence of Relative Advantage (H1) and Compatibility (H2) on adoption intentions confirms that tourists prioritize immediate utility and lifestyle alignment. In destinations such as the Bandung-Pangandaran corridor, where travel efficiency is paramount, digital payments are perceived as reliability signals that enhance convenience. This aligns with the convenience-first design philosophy observed in modern digital mobility platforms. Interestingly, the insignificance of Complexity (H3) and Trialability (H4) suggests a maturity in the digital literacy of Indonesian domestic tourists. Given that the sample is dominated by Millennials and Gen Z, the technical mechanics of e-wallets are no longer viewed as barriers, nor do they require preliminary testing before full implementation. This finding deviates from early technology acceptance models (Davis, 1989), indicating that in contemporary smart tourism, functional simplicity is an expectation rather than a competitive advantage.

The substantial negative impact of Perceived Risk (β = -0.315) must be evaluated through the lens of the digital divide. In remote or coastal tourism areas, infrastructural limitations—such as unstable mobile network signals—exacerbate perceived operational risks, distinguishing these environments from highly connected urban hubs. Furthermore, while the structural model

explains 57.5% of the variance in intention, the unexplained variance indicates the presence of exogenous systemic variables. Factors such as local merchant readiness, the availability of standardized QR codes at rural attractions, and the underlying telecommunications infrastructure are likely critical boundary conditions that determine the actual execution of transactions.

The most striking finding lies in the powerful anchoring effect of Perceived Risk (H5). Despite the perceived benefits, security concerns—specifically regarding data privacy and system reliability in coastal or remote areas—exert a substantial negative force on engagement. This confirms that risk barriers remain a primary source of resistance to innovation among Gen Z tourists. Conversely, Trust (H6) act as the quintessential mediator that bridges the gap between external stimuli and behavioral intention. The results underscore that trust is not merely a technical requirement but an emotional and cognitive bond formed through brand engagement and consistent information quality. Without this foundation, the adoption without engagement paradox persists, as travelers may possess the digital tools but lack the psychological security to deploy them in unfamiliar destination settings.

The strong relationship between Intention and Experiential Performance (H8) supports the view that digital payments are integral components of the modern experience economy (Gilmore & Pine, 1998). A frictionless payment process does more than facilitate a transaction; it shapes the traveler's memory and overall satisfaction. However, the significant indirect effect of Perceived Risk on Performance highlights a critical vulnerability. Negative encounters, such as technological friction or perceived insecurity, have a disproportionately large impact on tourists' evaluations of the destination, often overshadowing positive functional gains. Therefore, achieving high experiential performance requires destination stakeholders to move beyond superficial digitalization. They must focus on building resilience and aligning digital strategies with the specific motivations of sustainable tourists to ensure that technology serves as a bridge, rather than a barrier, to engagement.

Theoretical Contributions

This study offers several critical theoretical advancements to the fields of smart tourism and financial technology adoption, specifically by addressing the persistent paradox of adoption without engagement. By synthesizing the results of the structural model with established theories, the research contributes to the literature in the following ways: First, it extends the Diffusion of Innovations (DOI) Framework. This research refines the traditional DOI framework by demonstrating that in mature digital ecosystems, the influence of innovation characteristics is not uniform across all dimensions. While (Rogers, 1962) seminal work emphasizes five core attributes, this study highlights that, for tech-savvy travelers, Complexity and Trialability have ceased to be significant drivers of intention. Instead, Relative Advantage and Compatibility emerge as the primary functional antecedents, suggesting that in the context of Indonesian tourism, technological diffusion is now a matter of lifestyle integration and utility rather than technical ease of use. This necessitates a shift in theoretical focus from how to use a technology to how it fits the traveler's digital identity.

Second, Conceptualization of the Risk-Trust Equilibrium. A major contribution of this study is the integration of Perceived Risk and Trust as powerful psychological anchors that gatekeep the transition from adoption to engagement. While traditional models like the Technology Acceptance Model (TAM) focus on ease of use and usefulness (Davis, 1989), this research shows that a mental evaluation of security versus reliability heavily mediates intention to adopt. Specifically, the finding that perceived risk exerts a stronger negative influence than trust provides a theoretical explanation for the adoption without engagement paradox. It suggests that even with high functional benefits, the anchor of risk can stagnate a traveler's digital journey at the destination.

Third, Shifting the Dependent Variable to Experiential Performance. This research advances the literature by moving beyond Intention to Adopt as the outcome, instead positioning Destination Experiential Performance as the ultimate measure of technological success. By doing so, the study bridges the gap between fintech adoption and the Experience Economy (Gilmore & Pine, 1998). The empirical evidence confirms that digital payments are not merely transactional tools but are experiential drivers that shape travel memories and overall satisfaction. Furthermore, the mediating role of intention indicates that for technology to enhance destination performance, it must foster genuine user commitment rather than merely installing a platform.

Fourth, Contextual Nuance in Smart Destination Theory. Finally, the study contributes to smart destination theory by highlighting the disproportionate impact of negative technological encounters. The finding that negative memories—often rooted in risk or system failure—have a more lasting effect than positive ones provides a new dimension to how destination resilience should be theorized (H. Ju et al., 2025). This reinforces the idea that smartness in tourism is not merely about infrastructure but about the emotional and cognitive bonds formed through frictionless digital interactions.

Managerial Implications

The findings of this study provide a strategic blueprint for fintech providers and destination management organizations (DMOs) seeking to bridge the gap between initial technology adoption and sustained traveller engagement. First, given that relative advantage is the most dominant driver of intention, management must pivot their marketing strategies from promoting basic functionality to highlighting high-value propositions, such as exclusive tourism discounts, integrated loyalty programs, or priority access to popular attractions. In a landscape where technical ease of use is increasingly viewed as a baseline expectation rather than a competitive edge, providers must ensure their platforms are positioned as essential components of a superior, modern travel lifestyle.

Furthermore, addressing the potent negative impact of perceived risk is a critical priority for converting passive adopters into active users. To mitigate the adoption without engagement trap, providers should implement visible security certifications and real-time transaction transparency. At the same time, DMOs must invest in reliable digital infrastructure—particularly in remote or coastal tourism areas—to ensure that connectivity issues do not trigger negative travel memories. Beyond technical safeguards, fostering a trust-centric ecosystem through consistent information quality and authentic traveler testimonials is vital for building the long-term emotional engagement required for sustained usage. Ultimately, as digital adoption serves as a direct conduit to enhanced destination experiential performance, stakeholders must treat payment interfaces as experiential assets. By prioritizing a convenience-first design that minimizes friction, managers can transform routine financial interactions into positive encounters that reinforce destination resilience and secure traveler commitment.

CONCLUSION

This study successfully identifies the structural determinants of the adoption-without-engagement paradox in West Java's digital tourism landscape. The empirical results confirm that while Relative Advantage and Compatibility largely drive the diffusion of digital payment innovations, the transition from mere installation to active utilization is heavily gated by a psychological risk-trust equilibrium. The findings demonstrate that, for contemporary travelers, technical factors such as Complexity and Trialability are no longer deterrents, reflecting a mature level of digital literacy in the Indonesian domestic market. However, Perceived Risk remains a

formidable anchor that negates functional benefits, while trust serves as the vital relational bridge that fosters genuine adoption intentions.

Furthermore, the research establishes a powerful link between Intention to Adopt and Destination Experiential Performance. It concludes that digital payment systems are not merely back-end financial tools but are front-facing experiential assets that directly shape travel satisfaction and positive memories. When the adoption process is frictionless and secure, it enhances the overall performance of the destination experience. Conversely, high risk perceptions lead to a stalled digital journey, where the traveler has the technology but lacks the confidence to engage with it, ultimately diminishing the perceived quality of the destination's modern infrastructure.

Limitations and Future Research

Despite its empirical contributions, this study acknowledges several limitations that provide avenues for future inquiry: 1) Geographical Scope: The research locus was primarily focused on the Bandung-Pangandaran corridor in West Java. Future studies should expand this scope to include diverse destination typologies, such as remote rural tourism villages or emerging smart destinations outside Java, to test the model's generalizability. 2) Methodological Approach: This study employed a cross-sectional design, capturing a snapshot of tourist behavior. A longitudinal approach would be beneficial to observe how the adoption without engagement paradox evolves as travelers gain more experience with specific financial innovations over time; 3) Technological Variables: While this study focused on digital payments, future research could integrate other smart tourism components, such as AI-driven personalization or Augmented Reality (AR), to determine if the risk-trust dynamics remain consistent across different types of destination technologies; 4) Moderating Factors: Future investigations should explore the moderating effects of demographic variables—such as generational cohorts (e.g., Gen Alpha) or income levels—to provide a more granular understanding of innovation resistance and engagement patterns; 5) Technological Mitigation: Given the primary anchoring effect of perceived risk, future research should explore the integration of advanced technological safeguards. Investigating whether biometric payment authentication or generative AI-driven security monitoring systems can effectively mitigate functional and privacy risks will provide the empirical pathways needed to increase active engagement.

REFERENCES

Alhomaid, A. (2025). Building Trust in Sustainable Journeys: The Interplay Between Green Marketing, Green Brand Trust, and Tourism Purchase Intentions. *Sustainability*, *17*(18), 8464. https://doi.org/10.3390/su17188464

Chamboko- Mpotaringa, M., Lekgau, R. J., & Tichaawa, T. M. (2025). Drivers and Challenges of Tourism Small, Medium and Micro Enterprises (SMMEs) Technology Adoption. *African Journal of Hospitality Tourism and Leisure*, *5*(14), 1088. https://doi.org/10.46222/ajhtl.19770720.698

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *JSTOR*, *13*(3), 319–340. https://doi.org/10.5962/bhl.title.33621

Ghosh, P., Jha, S. S., Banerjee, S., & Mehta, P. (2026). Understanding the eWOM mechanism towards online travel agency adoption intention: A computational perspective using elaboration likelihood model. *Acta Psychologica*, *262*, 106091. https://doi.org/10.1016/j.actpsy.2025.106091

Gilmore, J. H., & Pine, J. (1998). Welcome to the experience economy. *Harvard Business Review*, *76 4*, 97–105. https://api.semanticscholar.org/CorpusID:32029736

Gutierriz, I., Ferreira, J. J., & Fernandes, P. O. (2025). Digital transformation and the new

combinations in tourism: A systematic literature review. *Tourism and Hospitality Research*, *25*(2), 194–213. https://doi.org/10.1177/14673584231198414

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. In *Handbook of Market Research* (3rd ed., Vol. 21, Issue 1). Springer International Publishing. https://doi.org/10.1007/978-3-030-80519-7

Han, H., Ayalew, Z. A., Kim, S. (Sam), Quan, W., Jarumaneerat, T., Quan, L., & Jin, M. (2025). Central bank digital money (CBDM) uses among patrons in hospitality and tourism. *Acta Psychologica*, *260*, 105465. https://doi.org/10.1016/j.actpsy.2025.105465

Ju, D., Jiang, S., Cohen, A., Foss, A., Mitts, S., Zharmagambetov, A., Amos, B., Li, X., Kao, J., Fazel-Zarandi, M., & Tian, Y. (2024). *To the Globe (TTG): Towards Language-Driven Guaranteed Travel Planning*. 240–249. https://doi.org/10.18653/v1/2024.emnlp-demo.25

Ju, H., Lee, T. J., Kim, H. L., & Hyun, S. S. (2025). Negative Memories Toward Airlines: Scale Development and Validation. *International Journal of Tourism Research*, *27*(2). https://doi.org/10.1002/jtr.70017

Lasisi, T. T., Tarkang, M. E., Omar Parvez, M., Şenlik, A. C., & Eluwole, K. K. (2025). From awareness to action: Understanding the role of economic costs and perceived convenience in tourist mobility decisions. *Journal of Open Innovation: Technology, Market, and Complexity*, *11*(4), 100682. https://doi.org/10.1016/j.joitmc.2025.100682

Prawira, M. F. A., Susanto, E., Goeltom, A. D. L., & Furqon, C. (2022). Developing Cashless Tourism from a Tourist Perspective: The Role of TAM and AMO Theory. *Journal of Environmental Management and Tourism*, *13*(8), 2104–2112. https://doi.org/10.14505/jemt.v13.8(64).03

Rogers, E. M. (1962). *Diffusion of Innovations*. The Free Press.

Susanto, E., Hendrayati, H., Rahtomo, R. W., & Prawira, M. F. A. (2022). Adoption of Digital Payments for Travelers at Tourism Destinations. *African Journal of Hospitality, Tourism and Leisure*, *11*(2), 741–753.

Tichaawa, T., & Chamboko-Mpotaringa, M. (2025). Tourist-Centric Framework to Align Digital Marketing Strategies in Tourism. *Tourism*, *73*(3), 429–448. https://doi.org/10.37741/t.73.3.3

Zhan, W., Shi, Y., & Lin, C. (2025). The impact of IRT and IDT on metaverse adoption in tourism: The moderating role of personal innovativeness among China's generation Z. *PLOS One*, *20*(6), e0327239. https://doi.org/10.1371/journal.pone.0327239