



Enhancing revisit intention through digital tourism experience and digital trust: the mediating role of tourist engagement in heritage tourism

Eko Yulianawan*, Evilina Sjaiful, Sandi Noorzaman, Novie Nostalgia Adiwinata

Sekolah Tinggi Ilmu Ekonomi GICI, Depok, Indonesia

Article info

Article history:

Submitted [05-03-2026]

Revised [11-05-2026]

Accepted [15-05-2026]

Keywords:

Digital tourism experience

Digital trust

Tourist engagement

Tourist revisit intention

Heritage tourism

Abstract

This study analyzes the influence of Digital Tourism Experience and Digital Trust on Tourist Revisit Intention, with Tourist Engagement as a mediating variable, in heritage destinations at Borobudur Temple and Jakarta Old Town. Using a quantitative approach with SEM-PLS, data were collected from 134 respondents through an online questionnaire. The findings reveal that Digital Trust significantly affects Tourist Engagement and Tourist Revisit Intention, both directly and indirectly through the mediation of Tourist Engagement, whereas Digital Tourism Experience has a direct effect on Revisit Intention and does not significantly influence Tourist Engagement or the indirect pathways. Furthermore, Tourist Engagement plays a crucial role in driving revisit intention, confirming that emotional, cognitive, and social involvement are key mechanisms in fostering tourist loyalty. These results reinforce the applicability of the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) in digital heritage tourism. Based on these findings, it is recommended that destination managers prioritize strengthening digital trust through reliable platforms, data security, and transparent communication, while also enhancing interactive and personalized digital features such as virtual tours, storytelling, and user-generated content to improve engagement; additionally, integrating digital and on-site experiences is essential to create a seamless tourist journey, and future studies are encouraged to expand the sample scope, include more diverse heritage destinations, and incorporate additional variables such as perceived value and satisfaction to enrich the research model.

Introduction

Tourism is one of the strategic sectors that makes a major contribution to national economic growth and regional development in Indonesia (M. Lee et al., 2025). Data from the Central Statistics Agency show that the tourism sector contributes around 5–6% to the national Gross Domestic Product (GDP) in recent years, creating millions of direct and indirect jobs (BPS, 2023). The success of tourism destinations not only drives economic transactions but also triggers regional infrastructure development, increases local community income, and promotes culture and historical heritage (M. Lee et al., 2025; Nguyen et al., 2025). Moreover, post-pandemic, Indonesia targets the recovery and growth of foreign tourist visits by strengthening leading destinations, such as world cultural heritage sites (Akhtar et al., 2021; Kalia et al., 2022). Academic studies over the last decade have shown an increased focus on the role of digital experiences in tourism in strengthening the relationship between tourists and destinations (Fang et al., 2023; Wu et al., 2024). Previous studies have discussed the role of digital tourism experience in influencing tourist satisfaction and loyalty (He et al., 2023; Rasul et al., 2025; Yu, 2024; Zheng et al., 2024), as well as the importance of digital trust in the context of digital transactions and interactions (Barkah & Febriasari, 2021; Lin, 2024; Sianipar et al., 2021). However, a research gap remains in integrating these two concepts with the tourist engagement variable as a mediator of increased revisit intention, particularly in heritage tourism. Some prior studies show its potential, but most remain limited to popular culture or natural tourism, so they do not adequately describe the dynamics at historic sites such as Borobudur Temple and Jakarta's Old Town. Previous research has highlighted that tourist engagement plays an important role as a mechanism linking experiences and beliefs to tourist behavior (Barkah & Febriasari, 2021; Mosquera, 2024; Spallone et al., 2024). Engagement not only includes cognitive and emotional aspects but also social ones, so travelers who feel engaged tend to have a stronger

*Corresponding author

Email address: Eko Yulianawan (ejulianawan86@gmail.com)

bond with the destination and show higher revisit intentions (Abror et al., 2025; Hammady et al., 2016). However, most previous studies examine engagement in the context of general tourism or digital marketing, so there have been few studies that examine tourists' involvement in digital-based heritage tourism, which has unique characteristics, such as high cultural value, historical narratives, and educational experiences.

The literature review also emphasizes the role of digital trust as a critical factor in tourists' interaction with the destination's digital platform. International studies show that digital trust influences consumer behavioral intentions through cognitive and emotional mechanisms, especially when travelers face risks or uncertainties in using digital technology. (Anser et al., 2021; M. Lee et al., 2025; Masri, 2021). However, the integration of digital experiences, digital trust, and tourist engagement is still rarely tested simultaneously within a single model, especially for historical sites that require an authentic, secure digital experience. Practically, heritage tourism destinations in Indonesia face challenges in combining adequate physical and digital experiences for tourists. For example, Borobudur Temple, as one of the UNESCO World Heritage Sites, reported a decrease in visit duration and low revisit intentions among foreign tourists, even though domestic visits were relatively stable (Ministry of Tourism and Creative Economy, 2023). Meanwhile, the historic area of Jakarta's Old Town is still struggling to improve the image of its digital services and visitor interactions, which seem conventional, especially among millennials and Gen Z, who prioritize interactive digital experiences. This phenomenon also indicates the importance of a deeper understanding of how digital tourism experience and digital trust can encourage tourist engagement and ultimately strengthen revisit intention.

To strengthen the practical relevance of this research, it is important to highlight more specific quantitative evidence regarding tourism sustainability challenges. For instance, recent reports from the Ministry of Tourism and Creative Economy, indicate that the average length of stay of international tourists at Borobudur Temple has declined to less than 1.5 days, while revisit intention remains below 30% for foreign visitors. Similarly, visitor data in Jakarta Old Town show that although annual visits exceed 10 million, the majority are one-time visitors with relatively low engagement in digital-based services and limited participation in cultural activities (Laporan Kinerja Kementerian Pariwisata, 2025). These conditions indicate inefficiencies in transforming tourist visits into sustainable economic value, as shorter stays and low revisit rates directly reduce tourism revenue, local business growth, and long-term destination competitiveness. Therefore, understanding the drivers of revisit intention, particularly through digital channels, is crucial to ensuring tourism sustainability.

From an analytical perspective, this study addresses both empirical and theoretical research gaps. Empirically, although prior studies have extensively examined digital tourism experience, digital trust, and tourist engagement, most have been conducted in the contexts of general tourism, smart tourism cities, or nature-based destinations, with limited focus on heritage tourism particularly in Indonesia. For example, studies by (Y. J. A. Lee et al., 2020; Mwesiumo et al., 2022) highlight the role of digital experiences in enhancing engagement, while research by (Mgiba, 2020; Zhang, 2021) emphasizes the importance of digital trust in shaping tourist behavior; however, these studies largely overlook heritage-specific contexts. This creates a contextual gap, as heritage destinations possess unique characteristics such as cultural authenticity, historical narratives, and educational value that may influence tourist behavior differently (Robert V. Kozinets, 2021; Tan et al., 2025). Theoretically, there remains a lack of integrative models that simultaneously examine the relationships among digital tourism experience, digital trust, and tourist engagement within a unified SEM-PLS framework. Previous studies tend to analyze these variables separately or in part for instance, focusing only on digital experience and satisfaction, or on digital trust and loyalty (Anser et al., 2021), without capturing their combined and mediating effects on revisit intention. Addressing these gaps is important to provide a more holistic and context-specific understanding of tourist behavior in digital heritage tourism.

Furthermore, the state of the art of this research lies in advancing digital tourism behavior models by integrating the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB) in the context of heritage tourism. This study contributes to the literature by proposing a comprehensive framework that links digital experience (as a representation of perceived usefulness and ease of use in TAM), digital trust (as a critical extension influencing attitudes and perceived control in TPB), and tourist engagement (as a mediating behavioral mechanism) in explaining revisit intention. By doing so, this research not only extends the application of TAM and TPB to a more specific and complex tourism context but also enriches the literature on digital tourism behavior by providing empirical evidence on how digital interaction, trust formation, and psychological engagement jointly shape sustainable tourist loyalty in heritage destinations. The urgency of this research is increasing, given the growing penetration of digital technology and the greater connectedness of tourists online. Destinations that can optimize the

digital experience and build tourist trust have a strong chance of earning loyalty and sustainable repeat visits. Therefore, this study aims to examine the relationship between digital tourism experience, digital trust, tourist engagement, and tourist revisit intention in the context of heritage tourism in Borobudur Temple and Jakarta Old City. The findings are expected to make a theoretical contribution to the digital tourism literature and to provide practical recommendations for destination managers on designing effective digital experience strategies to spur repeat visits and sustainable tourism growth.

This research draws on the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) as its main theoretical basis. TPB emphasizes that an individual's intention to commit a behavior, in this context, the intention to revisit (Tourist Revisit Intention), is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of heritage tourism, tourist attitudes are shaped by evaluations of experiences gained during the visit, subjective norms arise from the influence of friends, family, or communities, and perceptions of behavioral control reflect tourists' confidence in their ability to access destinations and their comfort with doing so. Destination digitalization plays an important role in shaping these three aspects through interactive digital experiences and the sense of security tourists feel when using technology-based services. The TPB emphasizes that subjective norms not only directly influence intentions but also moderate how experiences and perceptions of control shape travelers' decisions, thus providing a robust framework for understanding the behavioral mechanisms of revisits. TAM emphasizes that perceived ease of use and perceived usefulness of digital technology affect individuals' attitudes and intentions toward technology acceptance (Davis 1986). In the context of this research, TAM explains how Digital Tourism Experience shapes tourists' attitudes and perceptions of digital experiences in heritage destinations, while Digital Trust strengthens perceptions of security, comfort, and reliability in digital interactions. The integration of TPB and TAM enables a more comprehensive understanding of how digital experiences and trust affect travelers' attitudes, perceptions of control, and behavioral intent, while Tourist Engagement serves as a mediating pathway linking digital experiences and trust to repeat-visitor intent.

Digital tourism experience reflects the quality of tourists' interactions with destination digital technologies, such as applications, social media, information systems, and virtual content, which shape tourists' perceptions of the destination's value and overall impression (K. Guo et al., 2023; Haedar, 2023). Recent studies show that interactive, informative, and personalized digital experiences can increase tourist engagement with destinations (Tussyadiah & Fesenmaier, 2020; Verma et al., 2021). In the context of heritage tourism, digital experiences also serve as a means of interpreting historical and cultural values, enhancing the interest and depth of tourist experiences. Empirically, various international studies have found that digital experiences significantly affect tourist engagement. Wang et al. (2022) show that the quality of digital experiences enhances tourists' emotional and cognitive engagement with cultural destinations. Similar findings were reported by Li and Li (2021), Sun et al. (2023), and Zhang et al. (2021), who affirmed that rich digital experiences encourage tourists' active participation in destination activities. Based on these findings, the following hypotheses were formulated:

Digital trust refers to tourists' confidence in the security, reliability, and credibility of the digital systems used by tourist destinations (K. Guo et al., 2023; Haedar, 2023). In an increasingly digitized tourism environment, trust is a key factor in determining tourists' willingness to interact, share data, and engage further with the destination's digital services (Tiago, 2021). Without adequate trust, tourists tend to be passive and avoid deeper engagement (M. Lee et al., 2025). Previous research has shown that digital trust plays an important role in shaping tourist engagement. (Sutrisno et al., 2024) found that digital trust significantly increases traveler engagement on destination platforms. Studies by (Y. Guo, 2022; M. Lee et al., 2025; Sutrisno et al., 2024) Also, confirm that travelers with high trust levels exhibit more intense interaction and participation.

Tourist engagement refers to the level of psychological attachment tourists have to a destination, as reflected in their attention, enthusiasm, and active participation. (He et al., 2023; Rasul et al., 2025). Engagement is considered a form of long-term relationship between tourists and destinations, which goes beyond momentary gratification. (He et al., 2023). In the context of heritage tourism, high engagement enables tourists to build an emotional connection to the destination's historical and cultural value. Numerous empirical studies show that tourist engagement is a strong predictor of revisit intention. (Bitrián et al., 2021) show that emotionally and cognitively engaged travelers are more likely to return. These findings are reinforced by (Kaushik, 2018; Mgiba, 2020; Mursid, 2022), who consistently found a positive association between engagement and revisit intention.

Digital experiences not only increase engagement but can also directly affect revisit intention. Travelers who acquire a fun, informative, and easy-to-use digital experience are more likely to form a positive evaluation of the destination, which encourages the intention to return (Akhtar et al., 2021; K.

Guo et al., 2023; Haedar, 2023). In heritage tourism, digital experiences help enrich tourists' understanding of historical value, thereby increasing a deeper impression of the destination. Empirical evidence supports such a direct relationship. (Tiago, 2021) found that the quality of digital experiences significantly affects loyalty and revisit intention. Studies by (Arango Espinal et al., 2024; Camilleri, 2018) Confirm that digital experiences are a strategic driver of tourist revisits.

Digital trust is also considered an important determinant of tourists' revisit intentions. Travelers who feel secure and trust a destination's digital system tend to reduce their perceived risk and increase their long-term commitment to the destination (Wu et al., 2024). In the context of heritage tourism, digital trust is crucial because tourists often rely on digital information and services before and during their visit. Numerous international studies confirm the positive influence of digital trust on revisit intention. (Khairani & Fachira, 2021; Mathew, 2021) found that digital trust contributes significantly to tourist loyalty. Similar findings were reported by (Kalia et al., 2022; Kitsios, 2022), who confirmed that travelers with high levels of trust are more likely to revisit.

Based on engagement theory and prior empirical findings, tourist engagement is conceptualized as a mediating mechanism linking the effects of the digital tourism experience and digital trust on tourist revisit intention. Digital experiences and trust are expected to first shape traveller engagement, which then drives repeat intent, resulting from a long-term relationship with the destination. Previous research supports the role of engagement mediation in digital contexts. (Mathew, 2021; Sutrisno et al., 2024) found that engagement mediates the relationship between digital experience and loyalty. Studies by (M. Lee et al., 2025) also shows that engagement is the primary pathway through which digital trust influences sustainable behavior intentions.

To systematically explain the relationships among the variables examined in this study, a conceptual research model is developed based on the underlying theoretical framework and prior empirical findings. This model illustrates the hypothesized relationships between Digital Tourism Experience, Digital Trust, Tourist Engagement, and Tourist Revisit Intention, including the mediating role of Tourist Engagement. The proposed research model is presented in the following figure.

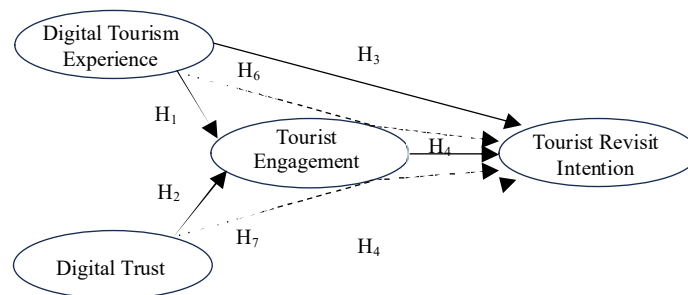


Figure 1. Reserch Model

Research Methods

This study employs a quantitative, causal (explanatory) research design to examine the relationships among latent variables: digital tourism experience, digital trust, tourist engagement, and tourist revisit intention. This approach is appropriate as the study aims to test a conceptual model and hypotheses derived from established theories and prior empirical findings. Data were collected using a cross-sectional method within a specific period to capture tourists' perceptions of digital experiences and their revisit intentions in the context of heritage tourism. For data analysis, this study uses Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4.0. This technique is suitable for analyzing complex models with multiple latent constructs and indicators, particularly when sample sizes are relatively small. The analysis process includes evaluating the measurement model (outer model) through tests of validity and reliability, and evaluating the structural model (inner model) to assess path coefficients, significance levels, and the model's predictive power.

After the research data are collected, the next step is to process and analyze them using SEM-PLS with SmartPLS 4.0. The process begins with data editing, coding, and tabulation to ensure the completeness and consistency of respondents' answers. Next, the measurement model (outer model) is evaluated using parameters such as convergent validity (loading factor ≥ 0.70 and Average Variance Extracted/AVE ≥ 0.50), discriminant validity (Fornell-Larcker Criterion < 0.90), and construct reliability (Composite Reliability ≥ 0.70 and Cronbach's Alpha ≥ 0.70). After the measurement model meets the required criteria, the analysis proceeds to the structural model (inner model) by examining the R-square

values (0.75 = substantial, 0.50 = moderate, 0.25 = weak), Q-square values (> 0 indicates predictive relevance), and Goodness of Fit (GoF) to assess the overall model fit. Hypothesis testing is conducted using the bootstrapping technique, with t-statistics > 1.96 and p-values < 0.05 at a 5% significance level, and includes assessing mediation effects through indirect effects. The final stage involves interpreting the analysis results to draw conclusions and formulate theoretical and practical implications of the study. (Hair, Anderson, et al., 2019).

Population and Sample Size

The population in this study is all tourists who have visited heritage tourism destinations, namely Borobudur Temple and Kota Tua Jakarta, and have experience using digital destination services. Sample size determination refers to the minimum rule of sample size in the Structural Equation Modeling analysis based on Partial Least Squares (SEM-PLS), i.e., the number of indicators multiplied by 5 respondents (Hair, Hult, et al., 2019). Given that 24 indicators are used in this study, the recommended minimum sample size is $(24 \times 5) = 120$ respondents. In this study, data were successfully collected and processed from 134 respondents. This number is considered to have met and exceeded the recommended minimum limit, making it feasible for SEM-PLS analysis.

Data Collection

Data collection was conducted from October to December 2025 using a structured online questionnaire. The questionnaire was compiled using a five-point Likert scale and distributed via Google Forms, enabling researchers to reach respondents more widely and efficiently. The online data collection method was chosen because it aligns with the characteristics of tourists who are accustomed to using digital technology and supports the effectiveness and efficiency of the research.

Sampling Techniques

The sampling technique used is purposive sampling, which involves selecting respondents based on criteria relevant to the research purpose. The criteria for respondents in this study include:

1. domestic and foreign tourists who have visited Borobudur Temple or Jakarta Old Town at least once.
2. Be at least 17 years old.
3. have used or accessed the destination's digital services, such as official websites, social media, applications, or other digital information systems.

Purposive sampling is appropriate because this study requires respondents with direct experience with the digital services of heritage destinations.

Data Analysis Methods

The collected data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). This method was chosen because it can simultaneously analyze relationships among latent variables and is well-suited to predictive research and theory development. The SEM-PLS analysis is carried out in two main stages: measurement model evaluation (testing the validity and reliability of constructs) and structural model evaluation (testing causal relationships and research hypotheses). SEM-PLS also has the advantage of not requiring a normal data distribution and is suitable for relatively moderate sample sizes, as in this study with 134 respondents.

Results and Discussion

Demographic Aspect

The demographic characteristics of the respondents were analyzed to provide an overview of the profile of the tourists who were the object of the study. This analysis is important for understanding the respondents' background, including gender, age, occupation, frequency of visits to tourist destinations, and income level, thereby strengthening the interpretation of the research results.

Table 1. Demographic Profile of Respondents

Characteristic	Category	Number (People)	Percentage (%)
Gender	Male	62	46.3
	Women	72	53.7
Age	17–25 years old	38	28.4
	26–35 years old	54	40.3
	36–45 years old	27	20.1

Characteristic	Category	Number (People)	Percentage (%)
Jobs	> 45 years old	15	11.2
	Student/Student	31	23.1
	Private Employees	52	38.8
	ASN/SOEs	21	15.7
	Entrepreneurship	18	13.4
	Others	12	9
Number of Visits to Destinations	1 time	49	36.6
	2–3 times	57	42.5
	> 3 times	28	20.9
Earnings per Month	< IDR 3,000,000	29	21.6
	IDR 3,000,000 – IDR 5,000,000	46	34.3
	IDR 5,000,000 – IDR 7,000,000	37	27.6
	> Rp7.000.000	22	16.5

Based on the table of respondents' demographic characteristics, the composition of respondents in this study is diverse. In terms of gender, female respondents dominated at 53.7%, while male respondents accounted for 46.3%. This condition indicates that heritage tourism tends to attract female tourists, who, according to several studies, generally demonstrate higher emotional involvement and greater interest in exploring meaningful tourism experiences. From the perspective of the Theory of Planned Behavior (TPB), this finding reflects the role of attitudes toward behavior, where female tourists may possess more positive evaluations and emotional attachment toward heritage tourism experiences, thereby influencing their behavioral intentions, including revisit intention. Based on age, most respondents were 26–35 years old (40.3%), followed by 17–25 years old (28.4%). The dominance of these productive age groups suggests that the tourists in this study are predominantly young adults who are relatively familiar with digital technology and online information systems. This finding is closely related to the Technology Acceptance Model (TAM), particularly the concepts of perceived usefulness and perceived ease of use. Younger tourists are generally more adaptive to digital platforms, such as online travel information, social media, virtual tours, and digital booking systems, which can enhance their digital tourism experience and strengthen their engagement with heritage destinations. In the TPB perspective, this demographic group may also possess stronger perceived behavioral control regarding the use of technology in planning and experiencing tourism activities.

Based on Table 1, the occupational aspect shows that the largest group of respondents were private employees (38.8%), followed by students (23.1%) and ASN/SOEs employees (15.7%). This composition indicates that heritage tourism appeals not only to students but also to professional groups with relatively stable mobility and purchasing power. From the TAM perspective, respondents with professional backgrounds are more likely to perceive digital tourism services as useful and efficient in supporting travel planning and decision-making processes. Meanwhile, within TPB, occupational background may influence subjective norms and perceived behavioral control, as individuals within professional environments are often influenced by social trends, recommendations, and accessibility to tourism-related technologies. Regarding the number of visits, most respondents had visited heritage destinations more than once: 42.5% had visited 2–3 times, and 20.9% had visited more than 3 times. These findings indicate that most respondents have substantial prior experience with the destinations studied, making them relevant and credible for assessing revisit intention. Repeat visitors are generally better able to evaluate the quality of their digital experiences and their level of engagement with the destination. In relation to TPB, repeated visits may strengthen positive attitudes and behavioral intentions toward revisiting the destination. Simultaneously, TAM suggests that satisfying digital experiences increase users' acceptance and continued use of tourism technologies, which may contribute to stronger revisit intentions. Based on monthly income, most respondents were in the middle-income category, namely IDR 3,000,000–IDR 5,000,000 (34.3%) and IDR 5,000,000–IDR 7,000,000 (27.6%). This condition indicates that respondents are dominated by tourists with moderate to relatively high purchasing power, enabling them to access and utilize digital technologies in tourism planning and experiences more intensively. In the TAM framework, higher economic capability may support technology adoption because respondents have greater access to smartphones, internet services, and digital tourism platforms. From the TPB perspective, adequate financial resources may also enhance perceived behavioral control, thereby increasing the likelihood of tourists engaging in and revisiting heritage tourism destinations.

Overall, the demographic profile of respondents in this study is consistent with the characteristics of heritage tourists who are increasingly connected to digital technology and experience-oriented tourism

behavior. The findings support the relevance of integrating TPB and TAM in explaining how tourists' attitudes, perceived behavioral control, subjective norms, perceived usefulness, and perceived ease of use collectively influence tourist engagement and revisit intention in heritage tourism contexts.

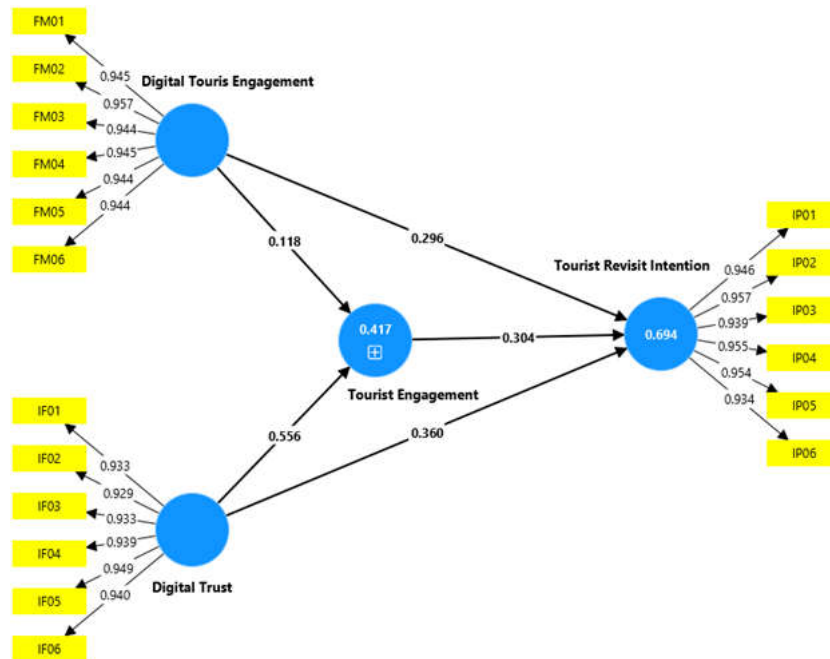


Figure 1. Outer Model Measurement

Evaluation of Measurement Models (Outer Model)

The evaluation of the measurement model (outer model) was conducted to ensure that the indicators used in this study measured the latent constructs validly and reliably. External model testing on the SEM-PLS approach includes convergent validity, discriminant validity, and construct reliability. Convergent validity was evaluated using the outer loading value and the Average Variance Extracted (AVE), with recommended outer loading values above 0.70 and minimum AVE values of 0.50, indicating that each construct explained more than half of the variance of its indicators.

Table 2. Convergent Validity Test

Variable/indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Digital Tourism Experience		0.977	0.978	0.896
DTE01	0.945			
DTE02	0.957			
DTE03	0.944			
DTE04	0.945			
DTE05	0.944			
DTE06	0.944			
Digital Trust		0.972	0.973	0.878
DT01	0.933			
DT02	0.929			
DT03	0.933			
DT04	0.939			
DT05	0.949			
DT06	0.940			
Tourist Engagement		0.949	0.949	0.795
TE01	0.899			
TE02	0.887			
TE03	0.896			
TE04	0.894			
TE05	0.892			
TE06	0.883			

Variable/indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Tourist Revisit Intention		0.977	0.978	0.898
TRI01	0.946			
TRI02	0.957			
TRI03	0.939			
TRI04	0.955			
TRI05	0.954			
TRI06	0.934			

Based on the results of the measurement model evaluation in Table 2, all constructs in this study exhibit excellent convergent validity and reliability. Convergent validity was assessed using outer loadings and Average Variance Extracted (AVE), while construct reliability was evaluated using Cronbach's alpha and Composite Reliability. In general, all indicators within each construct have outer loadings above 0.70, indicating that each indicator strongly represents the latent construct it measures. In the Digital Tourism Experience construct, all indicators (DTE01–DTE06) exhibit very high outer loadings, ranging from 0.944 to 0.957. In addition, Cronbach's alpha value of 0.977 and Composite Reliability of 0.978 indicate a very strong level of internal consistency. An AVE of 0.896 also indicates that this construct explains more than 89% of the variance in its indicators, meeting the criteria for convergent validity.

Digital Trust also showed very satisfactory results, with the outer loading value for all indicators (DT01–DT06) ranging from 0.929 to 0.949. Cronbach's alpha value of 0.972 and Composite Reliability of 0.973 confirm that this construct has very high reliability. An AVE value of 0.878 indicates that most of the indicator's variance is explained by the Digital Trust construct, so the construct is considered convergently valid. Furthermore, in the Tourist Engagement construct, all indicators (TE01–TE06) have outer loadings above 0.88, indicating strong contributions to the construct. Cronbach's alpha and Composite Reliability values of 0.949, respectively, indicate excellent reliability. The AVE of 0.795 also exceeds the required minimum, indicating that the Tourist Engagement construct has adequate convergent validity.

Meanwhile, the Tourist Revisit Intention construct shows very strong measurement performance, with the outer loading indicator values (TRI01–TRI06) ranging from 0.934 to 0.957. Cronbach's alpha value of 0.977 and Composite Reliability of 0.978 indicate very high internal consistency. An AVE of 0.898 indicates that this construct explains almost 90% of the variance in the indicator, meeting the criteria for optimal convergent validity. Overall, the results of the convergent validity test showed that all constructs and indicators in this study met the validity and reliability criteria recommended in the SEM-PLS analysis. Thus, the measurement model is declared feasible to proceed to the stage of structural model evaluation (inner model) and research hypothesis testing.

Table 3. Fornell-Larcker Criterion

Construct	Digital Tourism	Digital Tourism Experience	Tourist Engagement	Tourist Revisit Intention
Digital Tourism	0.937			
Digital Tourism Experience	0.715	0.947		
Tourist Engagement	0.640	0.515	0.892	
Tourist Revisit Intention	0.766	0.709	0.687	0.947

Based on Table 3 above, the results of the Fornell-Larcker Criterion indicate that all constructs in this study meet the criteria for discriminant validity. The diagonal values that are the square root of each construct—Digital Trust (0.937), Digital Tourism Experience (0.947), Tourist Engagement (0.892), and Tourist Revisit Intention (0.947)—are higher than the correlation between non-diagonal constructs. For example, the correlations between Digital Trust and Digital Tourism Experience (0.715), between Digital Trust and Tourist Engagement (0.640), and between Digital Trust and Tourist Revisit Intention (0.766) are all lower than the square root of AVE for Digital Trust. The same pattern is also observed in other constructs, suggesting that each construct measures a concept distinct from the others. Thus, the measurement model of this study exhibits good discriminant validity and is suitable for testing causal relationships in the structural model stage.

Goodness of Fit Model (GoF)

In this study, the Goodness-of-Fit (GoF) evaluation was conducted using the Standardized Root Mean Square Residual (SRMR), a key measure in SEM-PLS for assessing the model's overall fit. SRMR measures the average difference between the observed correlation in the data and the correlation predicted by the model. The smaller the SRMR value, the better the model's fit with the empirical data, as it accurately represents the relationships between variables. The SRMR value commonly used as a reference is ≤ 0.08 , indicating an adequate model fit (Henseler et al., 2015). If the SRMR value is below this threshold, it indicates that the research model has a good fit, meaning that the structure of the relationships among constructs, both endogenous and exogenous, is consistent with the data collected. SRMR evaluation is important before hypothesis testing and path analysis, as it ensures that the overall proposed conceptual model is trustworthy and results in valid parameter estimates.

Tabel 4. Standardized Root Mean Square Residual (SRMR)

Criteria	Saturated model	Estimated model
SRMR	0.031	0.031
NFI	0.928	0.928

Based on Table 4 above, the results of the Goodness-of-Fit evaluation using the Standardized Root Mean Square Residual (SRMR) indicate that the research model provides an excellent fit to the data. The SRMR values for both the saturated and estimated models were 0.031, well below the suggested threshold of 0.08 (Henseler et al., 2015), indicating that the difference between the observed correlations and those predicted by the model was very small. In addition, the Normed Fit Index (NFI) of 0.928 supports this interpretation, as it exceeds the minimum threshold of 0.90, indicating adequate fit. These results confirm that the structure of relationships among constructs in the research model is consistent with the empirical data, making the model amenable to hypothesis testing and subsequent path analysis.

Table 5. Coefficient of Determination

Construct	R-square	R-square adjusted
Tourist Engagement	0.417	0.408
Tourist Revisit Intention	0.694	0.687

Based on Table 5 above, the analysis results show the determination coefficient (R^2) for each endogenous construct, which describes the proportion of construct variance explained by the independent variables in the model. For the Tourist Engagement construct, the R^2 value is 0.417, and the adjusted R^2 is 0.408, indicating that approximately 41.7% of the variation in tourist engagement is explained by Digital Tourism Experience and Digital Trust. Meanwhile, the Tourist Revisit Intention construct has an R^2 of 0.694 and an adjusted R^2 of 0.687, indicating that about 69.4% of the variation in revisit intention is explained by Digital Tourism Experience, Digital Trust, and Tourist Engagement. This R^2 value falls within the medium-to-high range, indicating that the research model has good predictive power in explaining the variability of the endogenous constructs, thereby supporting the validity of the structural model for hypothesis testing.

Table 6. Hypothesis Test Results

The Influence of the Between Construct	Relationship	Original Sample	T Statistics	P Values	Conclusion
Digital Trust -> Tourist Engagement	Direct	0.556	5.260	0.000	Accepted
Digital Trust -> Tourist Revisit Intention	Direct	0.360	4.197	0.000	Accepted
Digital Tourism Experience -> Tourist Engagement	Direct	0.118	1.086	0.139	Rejected
Digital Tourism Experience -> Tourist Revisit Intention	Direct	0.296	3.929	0.000	Accepted
Tourist Engagement -> Tourist Revisit Intention	Direct	0.304	4.184	0.000	Accepted
Digital Trust -> Tourist Engagement -> Tourist Revisit Intention	Indirect	0.169	2.964	0.002	Accepted
Digital Tourism Experience -> Tourist Engagement -> Tourist Revisit Intention	Indirect	0.036	1.048	0.147	Rejected

Based on Table 6 above, the results of the hypothesis test indicate that the influence between constructs varies in significance. Digital Trust had a positive and significant influence on Tourist Engagement ($\beta = 0.556$; $t = 5.260$; $p < 0.001$) and on Tourist Revisit Intention directly ($\beta = 0.360$; $t = 4.197$; $p < 0.001$), and also had an indirect influence on Tourist Revisit Intention through Tourist Engagement ($\beta = 0.169$; $t = 2.964$; $p = 0.002$), which shows the role of partial mediation of Tourist Engagement in this relationship. In contrast, Digital Tourism Experience had only a direct significant effect on Tourist Revisit Intention ($\beta = 0.296$; $t = 3.929$; $p < 0.001$), while its effect on Tourist Engagement ($\beta = 0.118$; $t = 1.086$; $p = 0.139$) and indirect influence through Tourist Engagement ($\beta = 0.036$; $t = 1.048$; $p = 0.147$) was not significant. Meanwhile, Tourist Engagement had a positive and significant effect on Tourist Revisit Intention ($\beta = 0.304$; $t = 4.184$; $p < 0.001$). Overall, these results confirm that Digital Trust is a key driver of tourist engagement and revisit intent. In contrast, the influence of Digital Tourism Experience on revisit intent is direct, with no significant mediation through Tourist Engagement.

Discussion

This study uses the Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM) as the grand theory. TPB explains that an individual's intention to commit a behavior, in this context, the intention to revisit (tourist revisit intention), is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 2020). Meanwhile, TAM emphasizes that perceived ease of use and perceived benefits of digital technology affect users' attitudes and intentions to adopt the technology. In this study, Digital Tourism Experience and Digital Trust shape tourists' perceptions of heritage destinations through digital experiences, while Tourist Engagement serves as a cognitive and emotional mechanism linking digital experiences to repeat-visitor intentions. The results of the study show that Digital Trust encourages tourist engagement and revisit intentions, both directly and through the Tourist Engagement mediation mechanism. This is consistent with previous research that shows that digital trust strengthens consumer engagement and loyalty intent in the context of digital tourism. (Y. Guo, 2022; M. Lee et al., 2025). The theoretical implication is the strengthening of TAM and TPB in the context of tourism, by affirming that digital trust can mediate or strengthen the relationship between digital experiences and tourist behavioral intentions. The practical implication is that destination managers need to build secure, transparent, and reliable digital systems, such as ticket-booking platforms or interactive tour-guide apps, to increase trust, engagement, and revisit intent.

Digital Tourism Experience has a direct effect only on return-visit intentions, while its effect on tourist engagement is not significant. This suggests that engaging digital experiences can motivate travellers to return, but they don't automatically increase active engagement. The theoretical implication is that TAM should be expanded to include trust as a mediator or moderating factor between digital experiences and traveller engagement. The practical implication is that heritage destinations must design interactive and informative digital experiences, such as virtual tours, multimedia content, or gamification, so that tourists are not only informed but also encouraged to engage and feel engaged.

From the perspective of the Technology Acceptance Model (TAM), the insignificant effect of Digital Tourism Experience on Tourist Engagement can be explained by the distinction between perceived usefulness and perceived ease of use, as well as by the role of deeper psychological involvement. While digital tourism features (e.g., virtual tours, multimedia content) may be perceived as useful and easy to use—thus directly influencing revisit intention—they do not automatically generate strong cognitive or emotional attachment. TAM suggests that user acceptance of technology is primarily driven by functional evaluations rather than affective immersion. Therefore, tourists may appreciate the convenience and informational value of digital experiences without necessarily developing a sense of engagement. This indicates that engagement requires more than usability; it demands meaningful interaction, personalization, and emotional resonance, which are not always embedded in standard digital tourism platforms.

In contrast, the Theory of Planned Behavior (TPB) provides a strong explanation for the significant role of Digital Trust in shaping Tourist Revisit Intention. Within TPB, trust can be positioned as a critical antecedent of attitudes and perceived behavioral control. When tourists perceive digital platforms as secure, reliable, and transparent, they develop positive attitudes toward the destination and feel more confident in their ability to make travel-related decisions (e.g., booking, planning, revisiting). This sense of assurance reduces uncertainty and perceived risk, which are key barriers in digital environments. Consequently, trust not only strengthens behavioral intention directly but also indirectly by increasing engagement. Thus, Digital Trust acts as a psychological enabler within the TPB framework, reinforcing intention formation by aligning attitudes, reducing perceived risks, and bolstering confidence in decision-making.

In addition, Tourist Engagement has proven important in shaping the intention to revisit. Travelers who are emotionally, cognitively, and socially engaged are more likely to have a connection to the destination and return to visit, according to previous literature (Abror et al., 2025; Chen et al., 2024). The theoretical implication is that the SDGs can be expanded by including engagement as a mediating channel between attitudes/perceptions and behavioral intentions, thereby providing a more holistic understanding of the traveler decision-making process. The practical implication is that destination managers must create interactive content and programs, such as cultural workshops, online quizzes, or visitor communities, to keep travelers actively engaged and more motivated to make repeat visits. Overall, the study confirms that Digital Trust is a key driver of engagement and revisit intent, while Digital Tourism Experience directly influences return-visit intent. These findings strengthen the application of TPB and TAM in the context of heritage tourism and provide empirical evidence that a combination of digital experiences, trust, and tourist engagement is critical to building loyalty and sustainability in digital tourism destinations.

Conclusion

This study aims to analyze the influence of Digital Tourism Experience and Digital Trust on Tourist Revisit Intention, with Tourist Engagement mediating the relationship in heritage destinations at Borobudur Temple and Jakarta Old Town. Based on the analysis, Digital Trust significantly increases tourist engagement and revisit intentions, both directly and indirectly through the mediation of Tourist Engagement. This indicates that digital trust is the main factor in building tourist loyalty in heritage destinations. Digital Tourism Experience has only a direct effect on revisit intention without mediating engagement, suggesting that while engaging digital experiences can encourage travelers to return, they do not necessarily foster deeper or sustained tourist engagement. In addition, Tourist Engagement plays an important role as a mechanism that drives revisit intention, confirming that travelers' emotional, cognitive, and social engagement has a strategic role in mediating the relationship between digital experiences, trust, and loyalty. This research confirms that integrating digital experiences, digital trust, and tourist engagement is essential for increasing revisit intention in heritage tourism, while strengthening the application of the SDGs and the Technology Acceptance Model (TAM) in the context of digital-based tourism. Despite these contributions, this study has several limitations. First, the sample size is relatively small and focuses only on two heritage destinations, which may limit the generalizability of the findings to other destination types or cultural contexts. Second, the data were collected using a cross-sectional design, which does not allow observation of changes in tourists' perceptions, engagement, and loyalty over time. Third, the use of self-reported data may introduce response bias, as respondents' perceptions may not fully reflect their actual behavior. Finally, this study examines only Digital Tourism Experience and Digital Trust as antecedents. In contrast, other factors, such as destination image, service quality, or cultural authenticity, may also influence tourist engagement and revisit intention. Future research is encouraged to expand the scope of destinations, employ longitudinal designs, and incorporate additional variables to provide a more comprehensive understanding of digital tourist behavior in heritage tourism.

References

- Abror, A., Patrisia, D., Engriani, Y., Mulyani, E., Gaffar, V., Achmad, N., Najib, M., Kim, L., & Aujirapongpan, S. (2025). An Integrative Model Analyzing Revisit Intentions and Behavior in Halal Tourism: Evidence from Indonesia. *Tourism and Hospitality*, 6(3). <https://doi.org/10.3390/tourhosp6030151>
- Ajzen, I. (1991). The Theory of Planned Behavior, Organizational, Behavior, and Human Decision Processes. *Academic Press, Inc.*, 50.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4). <https://doi.org/10.1002/hbe2.195>
- Akhtar, N., Khan, N., Mahroof Khan, M., Ashraf, S., Hashmi, M. S., Khan, M. M., & Hishan, S. S. (2021). Post-covid 19 tourism: Will digital tourism replace mass tourism? *Sustainability (Switzerland)*, 13(10). <https://doi.org/10.3390/su13105352>
- Anser, M. K., Tabash, M. I., Nassani, A. A., Aldakhil, A. M., & Yousaf, Z. (2021). Toward the e-loyalty of digital library users: investigating the role of e-service quality and e-trust in digital economy. *Library Hi Tech*. <https://doi.org/10.1108/LHT-07-2020-0165>

- Arango Espinal, E., Osorio Andrade, C. F., & Arango Pastrana, C. A. (2024). Content Marketing and Digital Engagement in Amazonian Sustainable Tourism. *Revista de Administracao Contemporanea*, 28(6). <https://doi.org/10.1590/1982-7849rac2024240178.es>
- Barkah, B., & Febriasari, P. (2021). Factors that Influencing Tourists Revisit Intention. *Jurnal Dinamika Manajemen*, 12(1). <https://doi.org/10.15294/jdm.v12i1.25680>
- Bitrián, P., Buil, I., & Catalán, S. (2021). Enhancing user engagement: The role of gamification in mobile apps. *Journal of Business Research*, 132(July 2020), 170–185. <https://doi.org/10.1016/j.jbusres.2021.04.028>
- Camilleri, M. A. (2018). The Promotion of Responsible Tourism Management Through Digital Media. *Tourism Planning and Development*, 15(6). <https://doi.org/10.1080/21568316.2017.1393772>
- Chen, Y., Wang, X., Le, B., & Wang, L. (2024). Why people use augmented reality in heritage museums: a socio-technical perspective. *Heritage Science*, 12(1). <https://doi.org/10.1186/s40494-024-01217-1>
- Fang, S., Han, X., & Chen, S. (2023). The Impact of Tourist–Robot Interaction on Tourist Engagement in the Hospitality Industry: A Mixed-Method Study. *Cornell Hospitality Quarterly*, 64(2). <https://doi.org/10.1177/19389655221102383>
- Guo, K., Fan, A., Lehto, X., & Day, J. (2023). Immersive Digital Tourism: The Role of Multisensory Cues in Digital Museum Experiences. *Journal of Hospitality and Tourism Research*, 47(6). <https://doi.org/10.1177/10963480211030319>
- Guo, Y. (2022). Digital Trust and the Reconstruction of Trust in the Digital Society: An Integrated Model based on Trust Theory and Expectation Confirmation Theory. *Digital Government: Research and Practice*, 3(4). <https://doi.org/10.1145/3543860>
- Haedar, A. W. (2023). Digital Marketing Strategies in the Public Sector of Tourism: Enhancing Promotion and Engagement in the Tourism Industry. *Jurnal Ilmiah Ilmu Administrasi Publik*, 13(1). <https://doi.org/10.26858/jiap.v13i1.47689>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2019). Multivariate Data Analysis, Multivariate Data Analysis. In *Book* (Vol. 87, Number 4).
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hammady, R., Ma, M., & Temple, N. (2016). Augmented reality and gamification in heritage museums. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 9894 LNCS. https://doi.org/10.1007/978-3-319-45841-0_17
- He, M., Liu, B., & Li, Y. (2023). Tourist Inspiration: How the Wellness Tourism Experience Inspires Tourist Engagement. *Journal of Hospitality and Tourism Research*, 47(7). <https://doi.org/10.1177/10963480211026376>
- Kalia, P., Mladenović, D., & Acevedo-Duque, Á. (2022). Decoding the Trends and the Emerging Research Directions of Digital Tourism in the Last Three Decades: A Bibliometric Analysis. *SAGE Open*, 12(4). <https://doi.org/10.1177/21582440221128179>
- Kaushik, A. K. (2018). Does perceived travel risk influence tourist's revisit intention? *International Journal of Business Excellence*, 15(3), 352–371. <https://doi.org/10.1504/IJBEX.2018.092575>
- Khairani, A., & Fachira, I. (2021). The Influence of Different Digital Content Marketing on Consumer Engagement in The Tourism Sector. *International Journal of Social Science and Business*, 5(3). <https://doi.org/10.23887/ijssb.v5i3.38109>
- Kitsios, F. (2022). User-Generated Content behavior and digital tourism services: A SEM-neural network model for information trust in social networking sites. *International Journal of Information Management Data Insights*, 2(1). <https://doi.org/10.1016/j.jjime.2021.100056>
- Laporan Kinerja Kementerian Pariwisata Tahun 2025. (n.d.). Retrieved April 6, 2026, from <https://kemenpar.go.id/berita/laporan-kinerja-kementerian-pariwisata-tahun-2025>
- Lee, M., Lee, S. A., Shin, H. H., & Jeong, M. (2025). Revisiting and exploring trust in the digital era: conceptualization and scale development of digital trust in hospitality and tourism. *Information Technology and Tourism*, 27(1). <https://doi.org/10.1007/s40558-024-00310-2>
- Lee, Y. J. A., Jang, S., & Kim, J. (2020). Tourism clusters and peer-to-peer accommodation. *Annals of Tourism Research*, 83. <https://doi.org/10.1016/j.annals.2020.102960>
- Lin, M. (2024). Understanding the influencing factors of tourists' revisit intention in traditional villages. *Heliyon*, 10(15). <https://doi.org/10.1016/j.heliyon.2024.e35029>
- Masri, N. W. (2021). The effects of customer learning and shopping value on intention purchase and reuse in a digital market: The institutional trust–commitment perspective. *Sustainability (Switzerland)*, 13(8). <https://doi.org/10.3390/su13084318>

- Mathew, V. (2021). Does digital content marketing affect tourism consumer behavior? An extension of technology acceptance model. *Journal of Consumer Behaviour*, 20(1), 61–75. <https://doi.org/10.1002/cb.1854>
- Mgiba, F. M. (2020). Online reputation, virtual experience and tourists' revisit intentions. The case of vilakazi street tourism corridor in soweto. *South African Journal of Economic and Management Sciences*, 23(1), 1–11. <https://doi.org/10.4102/sajems.v23i1.3533>
- Mosquera, A. S. B. (2024). Applications of augmented reality in museums, impact on cultural heritage. *Gamification and Augmented Reality*.
- Mursid, A. (2022). Halal destination attributes and revisits intention: the role of destination attractiveness and perceived value. *International Journal of Tourism Cities*, 8(2), 513–528. <https://doi.org/10.1108/IJTC-03-2021-0040>
- Mwesiumo, D., Halfdanarson, J., & Shlopak, M. (2022). Navigating the early stages of a large sustainability-oriented rural tourism development project: Lessons from Træna, Norway. *Tourism Management*, 89. <https://doi.org/10.1016/j.tourman.2021.104456>
- Nguyen, T. H. H., Nguyen, G. T., Tučková, Z., & Hoang, S. D. (2025). Psychological ownership and knowledge sharing: Key psychological drivers of sustainable tourist behavior. *Acta Psychologica*, 253. <https://doi.org/10.1016/j.actpsy.2025.104715>
- Rasul, T., Santini, F. de O., Lim, W. M., Buhalis, D., Ramkissoon, H., Ladeira, W. J., Pinto, D. C., & Azhar, M. (2025). Tourist engagement: Toward an integrated framework using meta-analysis. *Journal of Vacation Marketing*, 31(4). <https://doi.org/10.1177/13567667241238456>
- Robert V. Kozinets. (2021). Reprint: YouTube Utopianism: Social Media Profanation and the Clicktivism of Capitalist Critique. *Journal of Business Research*, 131(98).
- Sianipar, R., Situmorang, J. M. H., Goeltom, V. A. H., & Gustian Yulius, K. (2021). Factors influencing tourist satisfaction and revisit intention to cibuntu tourist village during covid-19 pandemic. *JELAJAH: Journal of Tourism and Hospitality*, 3(1). <https://doi.org/10.33830/jelajah.v3i1.1847>
- Spallone, R., Lamberti, F., Olivieri, L. M., Ronco, F., & Lombardi, L. (2024). *Augmented Reality and Avatars for Museum Heritage Storytelling*. https://doi.org/10.1007/978-3-031-36155-5_16
- Sutrisno, R., Rafdinal, W., Septyandi, C. B., Gaffar, M. R., & Susanto, E. (2024). Disentangling Digital Influences on Tourist Behavior: The Role of Trust and Destination Image in the Social Media Era. *Journal of Tourism, Hospitality and Travel Management*, 2(2). <https://doi.org/10.58229/jthtm.v2i2.318>
- TAM Davis 1986*. (n.d.).
- Tan, Y., Jiang, G., Merajuddin, S. S., & Zhao, F. (2025). Analyzing the impact of digital technology on consumers' travel intentions. *Journal of Innovation and Knowledge*, 10(2). <https://doi.org/10.1016/j.jik.2025.100685>
- Tiago, F. (2021). Digital sustainability communication in tourism. *Journal of Innovation and Knowledge*, 6(1), 27–34. <https://doi.org/10.1016/j.jik.2019.12.002>
- Wu, W., Xu, C., Zhao, M., Li, X., & Law, R. (2024). Digital Tourism and Smart Development: State-of-the-Art Review. In *Sustainability (Switzerland)* (Vol. 16, Number 23). <https://doi.org/10.3390/su162310382>
- Yu, H. (2024). Factors Influencing Tourists' Intentions to Revisit Yunnan's Folk Tourism Destinations. *Pakistan Journal of Life and Social Sciences (PJLSS)*, 22(2). <https://doi.org/10.57239/pjlss-2024-22.2.001286>
- Zhang, X. (2021). The effect of tourists' autobiographical memory on revisit intention: does nostalgia promote revisiting? *Asia Pacific Journal of Tourism Research*, 26(2), 147–166. <https://doi.org/10.1080/10941665.2020.1718171>
- Zheng, K., Kumar, J., Kunasekaran, P., & Valeri, M. (2024). Role of smart technology use behaviour in enhancing tourist revisit intention: the theory of planned behaviour perspective. *European Journal of Innovation Management*, 27(3). <https://doi.org/10.1108/EJIM-03-2022-0122>