

Mediating Role of User Trust in the Relationship between Tourism Website Design and Brand Engagement with respect to OTA's

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Abstract

The rapid development of digital platforms has revolutionized the tourist industry, establishing Online Travel Agencies (OTAs) as essential intermediates in travel transactions. This study investigates the mediating role of user trust in the relationship between tourist website design and brand engagement for online travel agencies (OTAs). Utilizing survey data from 600 participants and employing mediation analysis via SPSS, the results indicate that tourist website design significantly enhances user trust, which then positively affects brand engagement. Moreover, the design of tourism websites exerts a direct beneficial influence on brand engagement, suggesting a mediating role of user trust. The study emphasizes the necessity of developing visually appealing, user-centric, and credible websites to enhance customer interactions and optimize brand engagement results. These findings provide significant insights for OTA managers seeking to bolster consumer loyalty and trust via strategic enhancements in website design. Future research avenues involve investigating supplementary mediators and doing cross-cultural and longitudinal studies to enhance the model's applicability.

Keywords: Tourism Website Design, User Trust, Brand Engagement, Online Travel Agencies (OTAs)

Introduction

The rapid growth of digital platforms has revolutionized the tourism sector, with online travel agencies (OTAs) like Expedia, Booking.com, and TripAdvisor becoming pivotal in enabling travel-related transactions. These platforms act as intermediaries between travellers and service providers, providing a convenient comprehensive solution for reserving lodgings, flights, and additional travel services. With the intensification of competition in the digital marketplace, the design of tourism websites has emerged as a pivotal element in influencing users' views, trust, and brand engagement. Website design includes usability, aesthetics, functionality, and information quality, all of which significantly impact brand engagement in the online travel sector.

The importance of website design in e-commerce is well-established, although its relevance to the tourism industry, especially Online Travel Agencies (OTAs), requires specific focus because of the intangible characteristics of travel services. In contrast to tangible goods, travel experiences cannot be assessed before consumption, rendering trust fundamental to online travel transactions. In this context, trust denotes a user's assurance in the trustworthiness, security, and credibility of a website (**McKnight et al., 2002**).

Online travel agencies (OTAs) compete fiercely for customers' trust. Visual aspects of a design, like colour, fonts, and images, can evoke certain feelings, which might impact confidence and choice-making (**Cyr et al., 2006**). According to (**Uli & Laksmidewi, 2023**), customers are more likely to book with an OTA whose websites they find visually appealing because they believe the OTA is trustworthy. Aspects that improve usability and trustworthiness include search filters, real-time availability, and secure payment methods. Because of their essential role in connecting customers with service providers, online travel agencies (OTAs) have a responsibility to create a trustworthy and user-friendly experience on their websites so that visitors feel comfortable making transactions.

Trust on OTA websites is also greatly influenced by security features. People are understandably hesitant to divulge sensitive financial and personal information online in light of the prevalence of cybercrime and data breaches. Site visitors can rest easy knowing their information is safe when they see trust seals and privacy policies displayed prominently (**Kim et al., 2008**).

Brand engagement is a complex concept that indicates the extent of a consumer's cognitive, emotional, and behavioural commitment to a brand (**Hollebeek, 2011**). It transcends simple purchasing behaviour to include continuous encounters, emotional connections, and advocacy efforts that reinforce the consumer-brand relationship. In the digital landscape, where brand interactions are frequently facilitated by online platforms, fostering brand engagement has become essential for maintaining competitive advantage (**Brodie et al., 2011**).

In the tourism industry, especially among Online Travel Agencies (OTAs), brand engagement is pivotal in shaping consumer retention, loyalty, and word-of-mouth referrals. The intangible and experiential characteristics of travel services necessitate the cultivation of robust interaction to alleviate perceived risk and enhance customer trust in online transactions. Website design, by influencing user experiences through aesthetics, usability, content quality, and interactivity, serves as a crucial catalyst for brand engagement (**Bilgihan, 2016**).

Well-designed websites may elicit good emotions, improve users' cognitive processing of brand content, and foster trust, all of which facilitate deeper engagement with the brand (**Harrigan et al., 2018**).

Problem Statement

The effectiveness of Online Travel Agencies (OTAs) in the competitive digital tourism business predominantly depends on the quality of their website design. Factors such as usability, aesthetics, clarity of information, and security significantly influence user views and are essential in establishing trust, which is crucial due to the intangible characteristics of tourist

services. While previous studies have highlighted the significance of website design in shaping customer behavior, there has been insufficient focus on the processes by which website design enhances brand engagement through user trust, especially in the context of online travel agencies (OTAs). This oversight is significant, as trust serves as a crucial intermediary that can amplify or inhibit users' emotional and behavioral commitment to a brand. Without comprehending this mediation process, OTAs risk their performance in brand engagement and loyalty, resulting in possible revenue loss. This study examines the mediating effect of user trust in the relationship between tourist website design and brand engagement, providing insights to improve digital engagement tactics in the online travel sector.

Objectives

To evaluate Mediating Role of User Trust in the Relationship between Tourism Website Design and Brand Engagement.

Hypothesis

H₀: There is no significant Mediating Role of User Trust in the Relationship between Tourism Website Design and Brand Engagement.

H₁: There is significant Mediating Role of User Trust in the Relationship between Tourism Website Design and Brand Engagement.

Literature Review

(Vij et al., 2024) This research aims to elucidate the intricate tourist marketing environment by examining the innovative impacts of AI-generated consumer insights on brand engagement and loyalty. Recent technological advancements have positioned AI as a transformative force in the tourism industry, fundamentally reshaping brand-customer interactions. This study utilizes quantitative methods within the scope of empirical research to analyze these complex features. The objective is to comprehend the influence of AI-generated customer insights on brand engagement and loyalty. This study aims to elucidate the constraints imposed on consumers' perceptions and behaviors by AI-driven efforts, so offering a comprehensive knowledge of the factors that foster brand engagement and customer loyalty towards sustainable implementation. The research findings offer significant insights for marketers and manufacturers aiming to create AI-centric products. Artificial intelligence has the capacity to enhance brand-consumer relationships and eventually cultivate enduring client loyalty within the travel and tourism industry. This study contributes to the continuing discourse over the potential influence of AI on future tourism marketing and consumer-brand interactions by highlighting the interconnectedness of various methodologies.

(Octavia et al., 2024) The objective of this study is to ascertain the impact of customer value, trust, and e-service quality on customer satisfaction. This study focuses on a community of internet users who regularly engage in online transactions. The exact number of users in this category is unclear or can be considered to be extremely large. The sample strategy employed in this study utilises a combination of purposive sampling and a non-probability sampling technique. A total of 100 samples were utilised in this experiment. This study utilises both

primary and secondary data. The researchers utilised web-based electronic surveys and online research tools to collect primary data. Several deductions can be drawn from the findings of the study and the ensuing debate, including the following: The quality of e-services has a substantial impact on enhancing customer happiness. Customer happiness is greatly influenced by the value that customers perceive in a product or service. Trust has a favourable impact on customer satisfaction. Customer satisfaction is impacted concurrently by the quality of online services, the value perceived by the customer, and the level of trust they have.

(Paul & Roy, 2023) The purpose of this research is to provide a thorough and systematic analysis of the factors that lead up to, during, and after ecotourism involvement. Using the ACI (Antecedent-Consequence-Intervention) paradigm, this research examines visitor involvement across six separate engagement areas. Use co-word analysis of previous literature to sort the subjects. In this review, 118 articles published between 1993 and 2022 are compiled using content analysis. In order to show how different engagement themes have changed over time, this study used an alluvial diagram. Ecotourism involvement was also mapped out in the results according to antecedent, consequence, intervention, and theme variables. This study found that over time, ecotourism interactions were more focused on companies, social media, and OTAs rather than locations. The paper also included detailed suggestions on potential directions to take further research.

(Mahzan & Salim, 2023) In online shopping, customers use the Internet to transact business with one another, rather than through a middleman. Many features of a website encourage customers to peruse it and, eventually, buy the goods, which in turn increases the necessity for online sales. Website design attributes are important, however there isn't enough study on how website design quality affects online purchase intention. At the same time, as they learn more about the value of e-commerce websites, consumers are evaluating the various features and services offered by these platforms. Consequently, this study aims to understand how website design quality relates to the intention to buy online. Questionnaires and an electronic survey were among the quantitative research tools used in this investigation. Statistical Package for the Social Sciences used in this study, to examine the quantitative reports. This study aims to assist marketers and sellers in comprehending the optimal marketing approach for implementing high-quality website design, specifically targeting younger consumers. All respondents unanimously concurred that the quality of website design had a notable impact on online purchase intention, despite the weak link with the variables.

(Zhang et al., 2021) This study aims to examine the relationships between various aspects of website design, customer experience feedback, and the likelihood that customers will purchase garments from online mass customisation (OMC) companies. Customers in Mainland China filled out 312 legitimate online questionnaires. Visual design, information quality, entertainment, aesthetics, educational, escapist experiences, flow, and patronage intention were among the eight characteristics evaluated using multi-item assessments. With the use of structural equation modeling (SEM), the study analyzed the factor structures and looked at the suggested connections between OMC clothing website design, the 4Es (entertainment, aesthetics, education, and escapism), user flow, and the desire to buy. There was only one null hypothesis. Users were more likely to return to the OMC website due to its attractive design,

high-quality content, and the instructive, engaging, and aesthetically pleasing experiences it provides. Because the study only surveyed consumers in a few major Chinese cities, its results may not be generalizable to the country as a whole. The websites were not systematically investigated. Furthermore, the visual style and information quality of OMC websites were the primary foci of this study. On the other hand, more specific and tangible aspects could be investigated in further studies. Website designers and marketers can gain useful insights into what features can increase customers' intention to visit OMC websites from the data.

(Dass et al., 2021) In today's market, every major brand is trying to reach the right people by engaging with its stakeholders through fan clubs, social media groups, and brand communities, among other online and offline channels. Since they provide advantages that can't be found anywhere else, brand communities have become more important branding tools for marketers. Every facet of the company stands to gain from a vibrant community. This essay's major focus is on the medical equipment business and how radiologist brand communities enhance brand engagement. A total of 152 users, including radiologists and product managers from an Indian partner company of a large medical equipment manufacturer, contributed data for the publication. There was just one cross-sectional descriptive design used in the research. Results from this study corroborate the proposed model of variable interactions by showing that brand communities are strongly correlated with brand engagement. According to this study, brand communities play a significant role in the marketing of high-value and high-risk goods and may be leveraged to boost brand engagement. The study's instruments were determined to be valid for the four constructs: community, engagement, brand trust, and satisfaction.

(Kumar et al., 2020) examine the relationship between trust, involvement, electronic word of mouth, and website quality as it pertains to purchase intention in the hotel industry. This research made use of a quantitative approach. In all, 380 people were asked to fill out 68 item statements. Among these, 357 legitimate responses came from guests who used the hotel's website to reserve a room within the last six months. Validity of concepts, reliability, model adequacy, and data normalcy were all checked. After making some changes, the data were ready to be used for hypothesis testing. Website quality affects user engagement and trust, according to this study. Customer trust is eventually achieved when user participation impacts e-wom on the website. The customer's propensity to buy is subsequently affected by this trust. Research like this adds to what is already known about what makes people want to use hotel websites to reserve rooms directly. Website trust, involvement, and electronic word of mouth are the primary areas of investigation in this study. To give managers more options for improving the purchase intent of making a reservation through the hotel website, we have given additional suggestions. Research from this study reveals that hotels can increase the likelihood that clients will book directly through their website by implementing methods such as cultural, location-based advertising, social media marketing, and search engine optimization.

(Kumar & Kaushik, 2020) Destination brand engagement (DBE) is a relatively new idea that has just lately emerged as a powerful method for developing and maintaining relationships with consumers. This study contributes to the existing body of knowledge about the relationships between DBE, all aspects of the destination brand experience (sensory, emotional, intellectual, and behavioral), and visitor outcomes; it aims to fill a vacuum in the literature by doing so. On

a second point, study had examined the ways in which DBE may boost destination brand advocacy and the likelihood of a repeat visit. There are a number of important recommendations for those working in the service and tourism industries.

Research Methodology

This section delves into the study's methodology, including its measures, ethical considerations, data gathering, and analysis processes. Research, as used in the academic context, is an endeavor in scholarship. Researchers have stated that research entails collecting data, forming conclusions, testing those findings to determine if they align with the hypotheses, identifying and redefining problems, and last, testing the hypotheses.

Research Design

In order to find the best method for a certain set of research goals and considerations, a study design is employed. You can build a systematic plan for data collecting and analysis using the research questions that were provided at the beginning of the project. The purpose of this work is to utilize a descriptive research design to examine Mediating Role of User Trust in the Impact of Tourism Website Design on Brand Engagement. Descriptive research can be done in a variety of methods, both qualitatively and quantitatively. The study's methodology included quantitative and qualitative approaches. This approach combines different methods. Gathering and analyzing data from participants is an important aspect of research, as is defining the aims and objectives of the investigation. This study aims to shed light on Mediating Role of User Trust in the Impact of Tourism Website Design on Brand Engagement with special references to OTA's.

Methods and Tools used

The data was collected through a survey. Surveys are common among many methods of collecting information from Participants who have visited tourism websites. Mediating Role of User Trust in the Impact of Tourism Website Design on Brand Engagement was assessed using a checklist. A self-designed questionnaire with a five-point Likert scale would be used to collect data and here we have taken 600 respondents and those have been obtained through survey of many offices.

Statistical Analysis

This study used the statistical software tool SPSS 22.0 to examine the data. The data that was considered most significant was investigated using analytical processes including mediation analysis and percentage approaches. Using percentage analysis, the study's most important components might be better understood. Percentages are a potent tool for data comparison and analysis. One of the easiest ways to reach your target audience is by using this method. An overarching view of the issue can be constructed once data is collected. Visual aids like graphs can make percentage analyses more engaging.

Results

This section contains the results of a survey that was conducted with 600 participants. The purpose of the survey was to investigate how online travel agencies (OTAs) affect the trust and purchase intentions of their users through website design. Using SPSS 22.0, we tested hypotheses through mediation analysis.

Table 4.1: Age wise distribution of respondents

Age		
	Frequency	Percent
18–24 years	203	33.8
25–34 years	179	29.8
35–44 years	80	13.3
45–54 years	72	12.0
Above 55 years	66	11.0
Total	600	100.0

The above table discusses age wise distribution of respondents. In 18 – 24 years, frequency is 203 and percentage is 33.8%. In 25 – 34 years, frequency is 179 and percentage is 29.8%. In 35 – 44 years, frequency is 80 and percentage is 13.3%. In 45 – 54 years, frequency is 72 and percentage is 12%. In above 55 years, frequency is 66 and percentage is 11%.

Graph 4.1: Graphical representation of age wise distribution of respondents

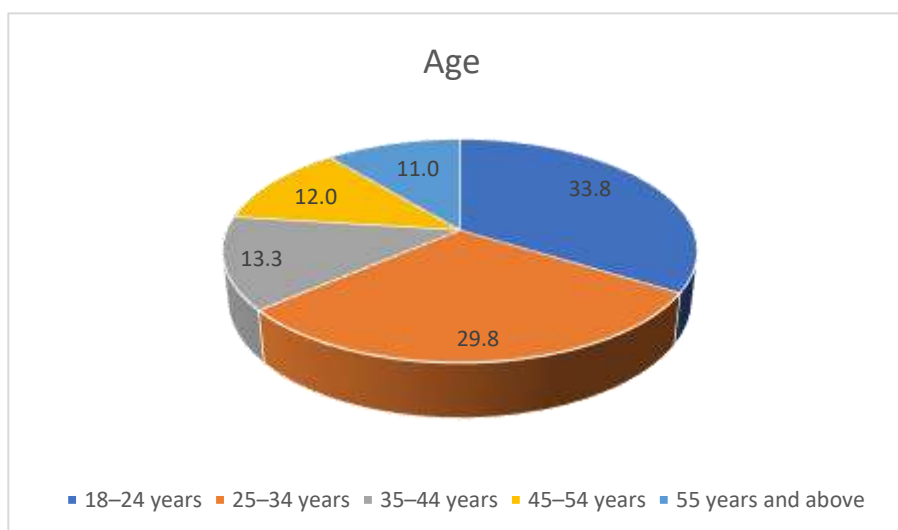


Table 4.2: Gender wise distribution of respondents

Gender		
	Frequency	Percent
Male	369	61.5
Female	231	38.5
Total	600	100.0

The above table discusses gender wise distribution of respondents. There are 369 males and 231 females are participated in this study whose percentage are 61.5% and 38.5% respectively.

Graph 4.2: Graphical representation of gender wise distribution of respondents

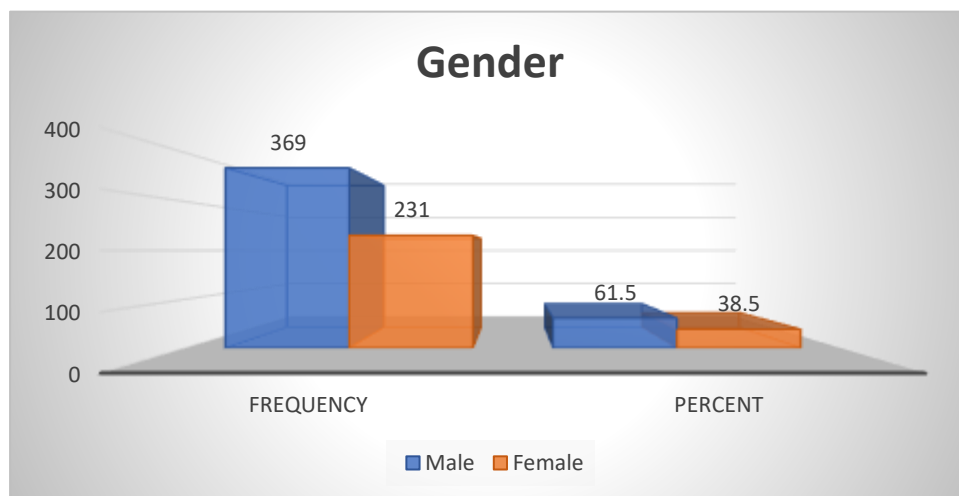


Table 4.3: Marital Status of respondents

Marital Status		
	Frequency	Percent
Married	239	39.8
Unmarried	361	60.2
Total	600	100.0

The above table discusses marital status of respondents. There are 239 married and 361 unmarried respondents are participated in this study, whose percentage are 39.8% and 60.2% respectively.

Graph 4.3: Graphical representation of marital Status of respondents

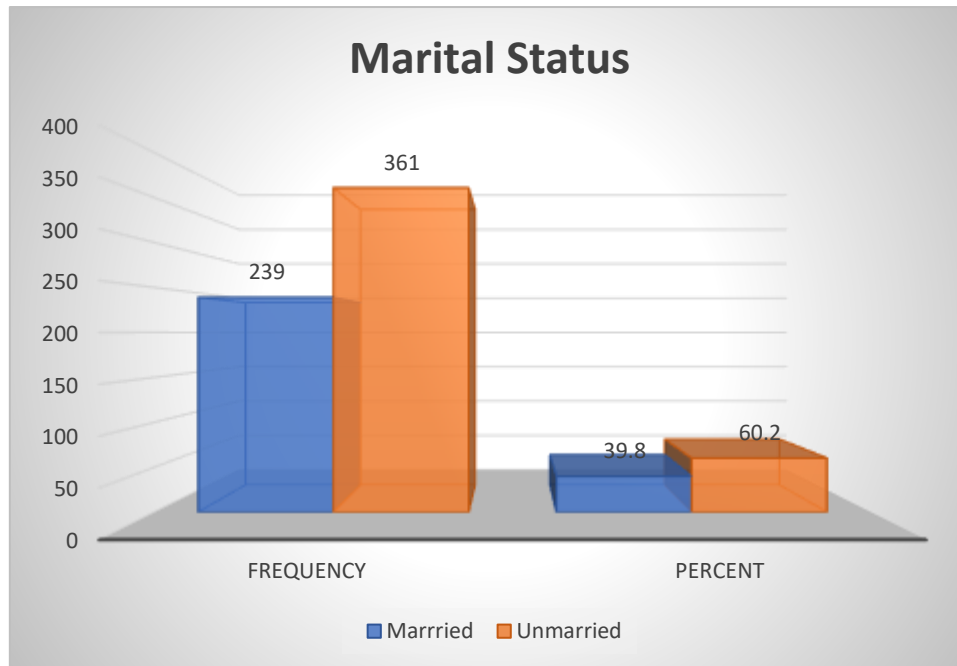


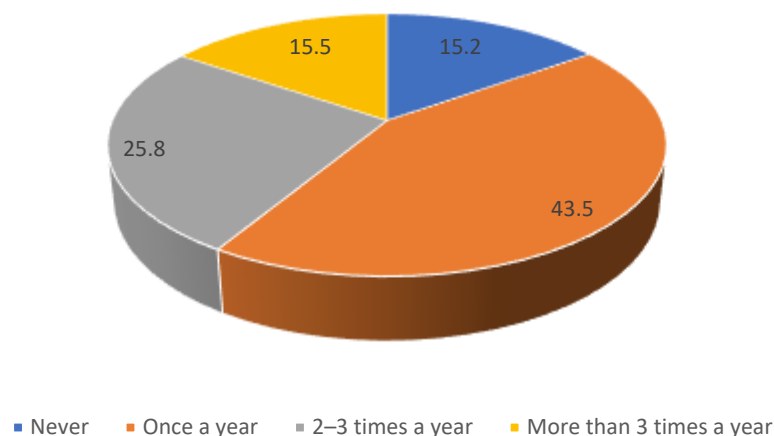
Table 4.4: Frequency of Online Purchases (Tourism Services)

Frequency of Online Purchases (Tourism Services)		
	Frequency	Percent
Never	91	15.2
Once a year	261	43.5
2–3 times a year	155	25.8
More than 3 times a year	93	15.5
Total	600	100.0

The above table discusses frequency of online purchases for tourism services reveals diverse patterns of user behavior. A notable 43.5% of respondents reported making online purchases once a year. Moderately frequent users, purchasing 2–3 times annually, account for 25.8% of respondents, indicating a substantial segment of individuals who utilize online services multiple times a year. Frequent users, making more than three purchases annually, comprise 15.5% of the sample, reflecting a group highly reliant on online platforms for their travel needs. However, 15.2% of respondents reported never using online services, highlighting a segment that may face barriers such as lack of trust, digital literacy, or a preference for offline methods.

Graph 4.4: Graphical representation of Frequency of Online Purchases (Tourism Services)

Frequency of Online Purchases (Tourism Services)



Hypothesis testing

Hypothesis 1: There is no significant Mediating Role of User Trust in the Relationship between Tourism Website Design and Brand Engagement.

Independent variable – Tourism website design

Mediator – user trust

Dependent variable – Brand engagement

OUTCOME VARIABLE: User Trust

Model Summary

R	R-sq	MSE	F	df1	df2	p
.8425	.7099	22.0965	1463.2123	1.0000	598.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.1027	.7043	2.9856	.0029	.7196	3.4859
TWD	.6030	.0158	38.2520	.0000	.5720	.6340

OUTCOME VARIABLE: Brand engagement

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7688	.5910	35.8698	431.4090	2.0000	597.0000	.0000

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Model
      coeff      se      t      p    LLCI    ULCI
constant  11.8247   .9040  13.0807   .0000  10.0494  13.6001
TWD        .4032   .0373  10.8127   .0000   .3300   .4764
UT         .2918   .0521   5.6004   .0000   .1895   .3941
***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y
      Effect      se      t      p    LLCI    ULCI
      .4032   .0373  10.8127   .0000   .3300   .4764

Indirect effect(s) of X on Y:
      Effect  BootSE  BootLLCI  BootULCI
UT      .1759   .0344   .1069   .2446

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----

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The mediation analysis results revealed that tourist website design (X) strongly predicted user trust (M) ($b = 0.6030$, $p < .001$), indicating that enhancements in website design correlate with elevated user trust. The model forecasting user trust explained almost 71.0% of the variation ($R^2 = 0.7099$). In the second phase of the model, both tourist website design ($b = 0.4032$, $p < .001$) and user trust ($b = 0.2918$, $p < .001$) were significant predictors of brand engagement (Y), with the model accounting for 59.1% of the variation in brand engagement ($R^2 = 0.5910$). The direct impact of tourist website design on brand engagement remained strong after incorporating user trust into the model, suggesting mediation. The indirect effect of tourist website design on brand engagement via user trust was significant (indirect effect = 0.1759; BootSE = 0.0344; 95% BootCI [0.1069, 0.2446]), since the confidence interval excluded zero. The findings indicate that user trust mediates the relationship between tourist website design and brand engagement, implying that a well-designed tourism website not only directly improves brand engagement but also indirectly enhances it by encouraging higher user trust.

Conclusion

This study examined the mediation role of user trust in the association between tourist website design and brand engagement in the setting of Online Travel Agencies (OTAs). The results indicated that the design of tourist websites substantially increases user trust, hence positively affecting brand engagement. Moreover, website design directly influences brand engagement, indicating a mediating impact of user trust. The results underscore the essential significance of a well-organized, visually appealing, and user-centric website in cultivating trust and enhancing customer interaction with tourist businesses. In a market characterized by intangible services and the necessity of trust, OTAs must see strategic website design not only as a functional platform but also as an essential instrument for fostering connections and enhancing brand loyalty. Future study may investigate similar patterns across other cultural and demographic groups or enhance the model by including additional possible mediators, such as perceived value or online experience pleasure.

Suggestions

- OTAs must emphasize user-centric website design by emphasizing critical characteristics like as aesthetics, usability, navigational simplicity, functionality, and clarity of information, which directly and indirectly affect customer trust and brand engagement.
- Enhancing trust signals, such as visible security features, customer testimonials, privacy policies, and secure payment gateways, is crucial for cultivating increased consumer confidence in online transactions.
- The customization of user experience via dynamic content, personalized suggestions, and interactive website elements may markedly improve trust and emotional connection with the company.
- Consistent usability testing and design modifications informed by user input and behavioral analytics are essential to align with changing user expectations and sustain elevated brand engagement.

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