

Smart Tourism Technology Attributes and Behavioral Intentions of Tourists Among the Resorts in Batangas Province: Basis of an Action Plan

Jillanie E. Dalawampu^{1*}, Maria Fe L. Menez, DBA²

¹Instructor 1, Batangas State University — The National Engineering University Pablo Borbon Campus, Rizal Avenue, Batangas City, Batangas Philippines

²Program Dean, Lyceum of Philippines University — Batangas, Capitol Site Batangas City, Batangas Philippines

**Corresponding author: Jillanie E. Dalawampu, jilldalawampu@icloud.com*

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Abstract: This study examined the relationship between smart tourism technology (STT) attributes and tourist behavioral intentions in resorts across Batangas Province. Employing a descriptive correlational design, the study aimed to explore how informativeness, accessibility, interactivity, and personalization of STT influence tourists' decisions to revisit, recommend, and show loyalty toward resorts. A structured questionnaire adapted from validated instruments was administered to 384 tourists who recently experienced smart technologies in Batangas resorts. The sample was carefully selected using random sampling to ensure representativeness. Data collection prioritized ethical considerations, including securing approvals and informed consent, and involved pilot testing to enhance instrument validity and reliability. Findings revealed that respondents were predominantly female, mostly adults, and married, indicating a diverse demographic profile. Tourists strongly agreed that the accessibility and informativeness of STT significantly enhanced their travel experience. Positive behavioral intentions were evident, particularly in revisit intentions and word-of-mouth recommendations, although willingness to pay more was less pronounced. Statistical analysis confirmed a significant positive relationship between STT attributes and behavioral intentions, suggesting that enhanced digital features foster greater tourist engagement and loyalty. Based on these results, the study proposes an action plan to improve STT implementation in Batangas resorts, emphasizing tailored strategies that reflect the needs of the main demographic groups. The findings contribute valuable insights to the growing field of smart tourism, highlighting the potential of digital innovations to enhance destination competitiveness and tourist satisfaction in emerging resort markets. Future research may explore additional factors, such as security, digital literacy, and social media influence, to deepen understanding of tourist behavior in smart tourism contexts.

Keywords: Smart tourism technology; Behavioral intention; Resorts; Batangas Province; Tourist engagement

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1. Introduction

Smart tourism technology has profoundly transformed how tourists experience and engage with destinations by incorporating digital innovations that offer seamless, personalized, and efficient travel experiences. Smart technology refers to advanced tools and systems—often powered by artificial intelligence (AI), the Internet of Things (IoT), big data, and real-time analytics—that collect and analyze data to automate responses, improve services, and enhance user experiences with minimal human intervention. In the tourism sector, these technologies include mobile applications, digital payment systems, AI-driven chatbots, and social media platforms, all of which contribute to improving convenience, satisfaction, and engagement throughout the tourist journey.

As the digital age progresses, mobile connectivity and social media have become integral components of the modern travel experience. Recent studies highlight that smart tourism technologies significantly enhance tourist engagement by providing real-time information, personalized recommendations, and interactive services^[1]. The increasing reliance on these technologies has reshaped tourist expectations, placing a premium on attributes such as interactivity, security, accessibility, and personalization. These features strongly influence key behavioral intentions—such as the likelihood of revisiting a destination, recommending it to others, and demonstrating brand loyalty^[2].

Resorts and tourism stakeholders that effectively integrate smart tourism technologies can greatly improve visitor satisfaction, strengthen emotional connections with their guests, and gain a competitive edge in an increasingly digital tourism landscape. As such, understanding and strategically applying smart technologies is vital for sustainable tourism growth and innovation.

Studies suggest that key attributes of smart tourism technology—including informativeness, accessibility, interactivity, and personalization—play a significant role in shaping tourists' behavioral intentions. These attributes not only improve convenience but also enhance engagement, increasing the probability that tourists will develop a strong connection to the destination and return in the future^[3-4]. Recent findings emphasize that seamless integration of smart tourism features fosters a more immersive and satisfying experience, ultimately influencing tourists' revisit intentions and word-of-mouth recommendations^[5].

Despite the widespread integration of smart technologies in tourism, research remains limited, particularly in the context of resorts as primary travel destinations. While many global cities and established tourist hubs have successfully adopted advanced digital tools to influence tourist behavior, destinations such as resorts in Batangas Province are still navigating the early stages of digital transformation. Batangas, renowned for its pristine beaches, diving spots, and rich cultural heritage, continues to attract both local and international tourists. However, the adoption of cutting-edge smart tourism technologies remains minimal, especially in resort-based and developing tourism destinations. While global tourism hubs have advanced in integrating innovations such as AI-powered services, virtual reality, and the Internet of Things (IoT), many local resorts still depend on basic digital tools like websites and social media for marketing and bookings. This limited adoption is often due to infrastructural constraints, financial limitations, and a lack of digital literacy among tourism stakeholders. Recent studies affirm this gap as Gajdošík and Marciš noted that small-scale tourism operations often lack the strategic capacity to implement smart technologies effectively, while Zare et al. highlighted the challenges in bridging the digital divide in rural and coastal areas^[6-7]. Similarly, Boes, Buhalis, and Inversini found that many destinations remain in early stages of smart tourism adoption due to insufficient governance and stakeholder engagement^[8]. The full potential of smart tourism remains underutilized, underscoring the need for targeted

investments and policy support to foster digital transformation.

One of the most widely used digital tools in the area is social media, which plays a critical role in shaping tourist perceptions, decisions, and experiences. Tourists often rely on platforms like Facebook, Instagram, and TikTok to discover destinations, compare resort experiences, read reviews, and share real-time travel content. However, most resorts in Batangas still underutilize these platforms, often limiting their digital presence to basic promotional posts or static information. There is a significant opportunity to enhance digital engagement through dynamic content strategies, influencer partnerships, and user-generated content campaigns that foster interactive relationships with potential visitors.

By strategically leveraging social media as a component of smart tourism technology, resorts in Batangas can boost visibility, strengthen brand identity, and build emotional connections with tourists. This shift can transform passive viewers into active promoters, increase repeat visitation, and elevate the province's competitiveness in the increasingly digital global tourism landscape ^[8-9].

Understanding how smart tourism technology attributes influence tourists' behavioral intentions is crucial for improving the overall tourism experience in Batangas Province. With the rapid digitalization of the tourism industry, resorts must adapt to evolving consumer expectations by leveraging smart technologies to enhance service delivery, engagement, and long-term tourist retention ^[10]. Smart tourism technologies, which encompass digital platforms, play a pivotal role in shaping how tourists interact with destinations, make travel decisions, and share their experiences ^[11]. These advancements have transformed tourism into a more personalized, interactive, and accessible experience, significantly influencing tourists' behavioral intentions, including their willingness to revisit, recommend, and even pay a premium for enhanced digital experiences ^[12].

Given the increasing competition among tourist destinations, Batangas Province must enhance its smart tourism initiatives to remain competitive. Recent studies highlight the crucial role of digital engagement in attracting modern travelers, who rely heavily on technology for trip planning, navigation, and experience-sharing ^[13]. Smart tourism technologies have been shown to improve destination competitiveness by optimizing resource management, enhancing visitor experiences, and promoting sustainable tourism development ^[14]. Moreover, the integration of smart technologies positively influences tourist satisfaction and well-being, particularly in marine and coastal tourism settings ^[15]. To cater to the evolving expectations of tech-savvy travelers, resorts and tourism stakeholders in Batangas should invest in digital transformation, ensuring seamless, innovative, and engaging tourism experiences.

The locale of the study is in Batangas Province, concentrating especially on DOT-accredited resorts and eliminating those categorized as Mabuhay Accommodation. The respondents were local tourists booking via social media, particularly Facebook. This study sought to examine the connection between the attributes of smart tourism technology (STT) and the behavioral intentions of tourists who visited resorts in Batangas Province. In particular, the study aimed to explore how key features influence tourists' decision-making when selecting a resort as their vacation destination. Recent research has shown that these STT elements play a crucial role in enhancing tourists' overall experiences, increasing satisfaction levels, and encouraging positive behavioral outcomes such as return visits and word-of-mouth referrals ^[1-2, 8].

This study holds significant practical value for the tourism industry in Batangas Province. By identifying the relationship between key attributes of smart tourism technology and tourist behavioral intentions, it offers actionable insights for enhancing digital tourism services. The findings can help tourism operators and resort owners optimize their online platforms, improve user experience, and develop data-driven marketing strategies

that encourage repeat visits. Additionally, the conclusions and recommendations from this research will be shared with resort management to support decision-making and strategic planning.

Focusing specifically on Batangas Province, the study provides a contextualized understanding of how smart tourism technologies influence tourist behavior in a region that is both developing and experiencing rapid tourism growth. Given Batangas' strategic location near the capital and its rich blend of natural and cultural attractions, embracing technological innovation in tourism is both timely and necessary. The integration of digital tools such as mobile-friendly websites, AI-powered services, and interactive social media campaigns reflects the province's move toward modernizing its tourism offerings while maintaining its local identity.

Moreover, the research examined how core attributes of smart tourism technology—accessibility, informativeness, personalization, interactivity, and responsiveness—shape tourists' behavioral intentions. These include their likelihood to revisit, recommend the resort to others, remain loyal to the brand, and pay more for enhanced services. The findings offer valuable guidance for tourism stakeholders, showing how digital transformation can elevate the tourist experience, build emotional connections with visitors, and foster sustainable development within the local tourism sector.

Ultimately, this study lays the groundwork for developing a comprehensive action plan to strengthen the smart tourism landscape in Batangas Province. By using data-informed strategies, stakeholders can implement targeted interventions to improve the quality and reach of digital tourism services. The action plan will support the seamless integration of smart technologies, helping Batangas maintain its competitive edge and appeal in the digital era. These efforts are expected to attract more tourists, encourage repeat visits, boost customer loyalty, and drive sustainable economic growth across the region.

2. Objectives of the study

The study assessed the relationship between smart tourism technology attributes and the behavioral intentions of tourists among the resorts in Batangas Province.

Specifically, the research described the demographic profile of tourists in terms of age, sex, and civil status.

The study determined smart tourism technology attributes in terms of: informativeness, accessibility, and interactivity; determined tourist behavioral intentions, particularly their revisit intention, word-of-mouth recommendations, and willingness to pay more. Lastly, it proposed an action plan to enhance the implementation of smart tourism technology among resorts in Batangas Province.

3. Research design

This study employed a descriptive-correlational research design, which is effective for identifying relationships between variables and understanding trends in a given population ^[16]. It explored how key attributes of smart tourism technology—such as informativeness, accessibility, interactivity, and personalization—relate to tourists' behavioral intentions in Batangas Province resorts.

A quantitative approach was used, with survey questionnaires as the main data collection tool. This method enabled the structured gathering of data from local tourists, supporting accurate and consistent analysis ^[17]. The use of standardized instruments contributed to the reliability and validity of findings, facilitating a clear understanding of the patterns and connections among the variables studied ^[18].

4. Respondent of the study

The participants of this study comprised 384 tourists who had availed themselves of services at various selected resorts across Batangas Province. These individuals were carefully selected based on their direct and recent exposure to smart tourism technologies integrated into the resort experience. The sample included domestic travelers, representing diverse demographic backgrounds in terms of age, gender, occupation, and travel purposes, ranging from leisure vacations to family holidays and business retreats. Their inclusion was intentional, as they were able to provide authentic, experience-based feedback on the functionality, usability, and overall influence of smart tourism technologies on their travel experience. These tourists interacted with features such as mobile-responsive websites, AI-powered concierge services, online booking platforms, interactive digital guides, real-time service updates, and social media engagement tools. Their perspectives offered rich and nuanced insights into the effectiveness of these technologies, particularly in relation to core attributes like informativeness, accessibility, interactivity, and personalization—attributes central to shaping satisfaction and behavioral intentions in modern tourism settings.

The sample size of 384 participants was determined using Cochran's formula, a widely accepted method for calculating sample size in studies where the total population is unknown. This approach ensured statistical reliability and representativeness. The calculation incorporated several essential parameters: a 95% confidence level ($z = 1.96$), a margin of error of 5% ($E = 0.05$), and a population proportion of 50% ($P = 0.5$), the most conservative estimate to account for maximum variability. To further ensure the generalizability of the results, the study employed random sampling techniques in selecting tourists who had availed themselves of resort services and experienced smart tourism technologies in Batangas Province. This method minimized selection bias and allowed for equal opportunity among participants to be included in the study, thus enhancing the validity of the findings. This approach ensured adequate representation of the broader tourist population visiting Batangas resorts, allowing the study to capture a diverse range of experiences and perspectives. The tourists' feedback contributed to a comprehensive understanding of how smart tourism technologies influence behavioral intentions, such as their likelihood to revisit or recommend the destination. Ultimately, their insights are vital for informing digital transformation strategies in the resort tourism sector of Batangas Province.

5. Data gathering instrument

The study employed an adapted structured questionnaire as the primary data-gathering tool to comprehensively examine how smart tourism technology attributes influence tourist behavioral intentions in selected resorts across Batangas Province. The instrument was modified from previously validated tools to suit the unique cultural and operational context of local tourism settings, ensuring both relevance and academic rigor.

The questionnaire was organized into three main parts. Part I collected demographic information such as age, sex, and civil status. This section was vital for developing respondent profiles and identifying patterns in technology use and perceptions across different demographic groups. Part II measured key smart tourism technology attributes, including informativeness, accessibility, interactivity, and personalization. Each attribute was assessed using 5 to 7 items that captured tourists' evaluations of how these technologies enhanced their travel experiences. Part III focused on tourists' behavioral intentions, specifically their willingness to revisit, spread word-of-mouth, show loyalty, and pay more for services. Each dimension included 4 items designed to capture forward-looking attitudes linked to smart tourism experiences.

To ensure content validity and reliability, the draft questionnaire was reviewed by a panel comprising a research adviser, a tourism academic, a resort manager, and a resort owner. Their insights led to refinements in language, structure, and item relevance. A pilot test involving 30 participants with similar profiles to the target population was also conducted to assess clarity, consistency, and internal reliability. Minor revisions were made to enhance the instrument's effectiveness.

The final questionnaire was administered to 384 randomly selected tourists who had direct experience with smart tourism technologies in Batangas resorts. Respondents were approached either in person or through online resort-affiliated platforms. Before participation, individuals were informed of the study's purpose, assured of confidentiality, and asked for their voluntary consent.

Parts II and III of the questionnaire used a 4-point Likert scale: 4 = Strongly Agree, 3 = Agree, 2 = Disagree, and 1 = Strongly Disagree. This scale was intentionally chosen to discourage neutral responses and prompt definitive answers. The data gathered were analyzed using mean scores and standard deviations to identify prevailing trends and patterns. These findings ultimately informed the development of an action plan to enhance the implementation of the ordinance.

6. Data gathering procedure

The data-gathering process began with coordination and approval from resort management and relevant authorities in selected areas of Batangas Province. After securing permissions, ethical standards were upheld through informed consent, ensuring voluntary participation and confidentiality. A total of 384 tourists, selected for their direct experience with smart tourism technologies, participated in the study.

A structured, pilot-tested, and validated questionnaire served as the primary data collection tool. It was administered during scheduled on-site visits, with assistance provided to clarify any questions. Data accuracy was ensured through validation and cleaning procedures, checking for completeness and consistency. The collected data were then analyzed using statistical methods to identify trends and behavioral patterns, providing insights to enhance tourism practices in the province.

7. Data analysis

The data were collected from respondents using the standardized questionnaires. In calculating and evaluating the data, weighted means were computed to assess the respondents' organizational commitment, morale, and leadership practices. Analysis of variance (ANOVA) was applied to determine the significant differences between the firmographic profile and all other variables. Additionally, Pearson's r-correlation was used to determine the relationships among the three variables. After statistical treatment, all the data were presented in tabulated form or through visual representations. The data were then critically interpreted and analyzed. Finally, the researcher provided conclusions and recommendations for program development at the conclusion of the research.

8. Ethical considerations

Ethical considerations were strictly observed in this study on smart tourism technologies in Batangas Province to protect participants' rights, ensure confidentiality, and promote transparency. Informed consent was obtained

from the 384 tourist participants, who were fully briefed on the study's purpose, procedures, and potential risks. Anonymity was maintained through coding instead of personal identifiers, with all data kept private and accessible only to authorized researchers. Transparent communication and the principle of beneficence guided the process, ensuring participant safety and reinforcing the study's integrity.

9. Discussion

9.1. Percentage distribution of the respondents' profiles

These factors provide insights into participant profiles and their potential influence on behavioral intentions regarding smart tourism technology in Batangas Province. Female respondents comprised 56.3% of the sample, outnumbering males (43.8%). This aligns with trends in tourism engagement, where women are often drawn to relaxation and family-oriented travel. Males, though fewer, are notably active in adventure-based tourism such as hiking and diving, consistent with Bautista's findings on eco-tourism in Batangas^[19].

The majority of respondents were aged 28–43 (46.4%), followed by those aged 18–27 (31.5%). These findings support Reyes, who noted high participation among younger tourists in recreational and coastal tourism activities^[20]. Older tourists, though fewer, are more prevalent in heritage and eco-tourism areas.

In terms of civil status, 54.7% were married and 45.3% were single. This suggests that Batangas appeals both to families and solo travelers. Married individuals favor destinations offering rest and bonding, while singles often seek lively experiences such as nightlife and group adventures—again echoed in Reyes' research on Laiya beach tourism^[20].

9.2. Smart tourism technology attributes in terms of informativeness

This highlights smart tourism technology attributes related to informativeness. The data illustrates how effectively digital platforms meet tourists' needs for accessible, accurate information. This supports existing literature emphasizing the value of real-time updates, interactive content, and user-friendly interfaces in enhancing the travel experience^[21].

The findings reveal that the highest-rated attribute of smart tourism technologies is the provision of information about attractions, accommodations, and activities ($M = 3.61$). This underscores the crucial role of centralized, reliable, and accessible digital information in enhancing tourist experiences, particularly in diverse destinations like Batangas Province. Tourists highly value digital platforms that act as one-stop hubs for planning and navigation, which reduce uncertainty and improve satisfaction.

This preference reflects a shift in tourist behavior, where smart technologies are not only convenience tools but also primary decision-making aids. Studies such as Lee and Xie and Buhalis and Amaranggana support this, emphasizing how digital systems enhance planning efficiency and user trust^[12–13]. Similarly, Xiang et al. and Huang et al. found that platforms focusing on essential travel needs significantly improve engagement and destination appeal^[14–15]. For Batangas, showcasing its varied tourism offerings—beaches, heritage sites, and eco-tourism—through well-structured digital content is key to competitiveness.

In contrast, the lowest-rated feature was the provision of real-time updates on promotions and events ($M = 3.47$), indicating that tourists consider promotional content less critical than core informational features. This may stem from a preference for authentic experiences over temporary deals, especially in regions like Batangas, known for immersive tourism. Tourists often rely on third-party apps or influencers for such updates, viewing

destination-based promotions as less relevant unless they are timely and personalized ^[16–17].

This suggests that while promotional features can add value, their impact depends on contextual relevance and integration with user interests. In more experiential destinations, excessive or irrelevant promotions may even disrupt user satisfaction ^[18].

The composite mean of 3.51 (“Strongly Agree”) confirms that users perceive smart tourism technologies in Batangas as highly informative. This aligns with global research, which highlights informativeness as a key success factor ^[18–19]. However, areas such as real-time updates, multimedia content, and third-party integration still offer room for improvement ^[20].

9.3. Smart tourism technology attributes in terms of accessibility

The highest-rated indicator highlights the essential role of mobile-friendly interfaces in enhancing user experience across various devices. Mobile-optimized platforms significantly boost engagement by adapting to different screen sizes and offering intuitive navigation, a vital feature as travelers increasingly rely on mobile devices for trip planning and bookings ^[16]. These platforms also promote inclusivity through accessibility features like screen readers and voice commands ^[17]. Beyond accessibility, mobile optimization enhances user satisfaction and business performance by enabling quick loading times, smooth transactions, and AI-driven personalization ^[18]. Destinations that adopt mobile-first strategies benefit from increased tourist engagement and economic growth while contributing to sustainability through real-time updates and efficient services ^[19]. In contrast, community-based traffic updates, though helpful, received the lowest ratings. While real-time, crowdsourced data aids in trip planning and promotes collaborative mobility, it is often perceived as supplementary compared to features directly linked to travel convenience, like booking or personalization ^[20]. Nonetheless, it contributes to sustainable practices and traveler awareness ^[21]. The composite mean of 3.55 under “Strongly Agree” affirms users’ satisfaction with smart tourism accessibility features, from mobile optimization to real-time updates, confirming their value in modern travel experiences ^[22]. Prior studies support these findings, noting that intuitive design and inclusive interfaces encourage higher adoption and satisfaction, especially for users with disabilities ^[23]. Features like instant bookings and navigation tools enhance efficiency and trust, while traffic updates help ease mobility stress and improve urban tourism ^[24–25]. Finally, interactivity through live chat, online booking, and social media integration received the highest praise, with respondents agreeing these features simplify trip management and optimize service delivery ^[26].

9.4. Smart tourism technology attributes in terms of interactivity

Live chat support offers real-time assistance during planning, boosting customer satisfaction ^[27]. Social media integration fosters engagement by enabling tourists and providers to share experiences and access personalized promotions ^[28]. Together, these features build trust, engagement, and loyalty, vital for long-term tourism success.

Interactive features foster emotional connections beyond usability. Chat and social media allow tourists to participate in communities and share content that influences decisions ^[28]. AI booking systems and personalized recommendations customize experiences, encouraging repeat visits ^[29]. This creates a trusted, convenient ecosystem essential for tourism’s digital transformation.

AI-driven booking systems streamline reservations, enhancing efficiency ^[29]. Live chat provides quick responses, reducing uncertainties, while social media enables sharing and real-time promotions ^[28]. Combined, they offer a connected, efficient, and personalized tourism experience that drives bookings and loyalty.

AI chatbots handling FAQs and escalating complex issues rank lowest. Despite their efficiency, tourists prefer human agents for complex problems, showing AI's limitations in customer service ^[30]. Chatbots manage up to 80% of routine queries but may fail with nuanced issues, requiring seamless escalation to humans.

Although chatbots reduce wait times and costs, they lack the ability for personalized responses, highlighting the need for hybrid systems combining AI and human agents for better accuracy and satisfaction ^[31]. Human involvement remains key for personalized service.

Some tourists still value human interaction for complex decisions despite AI advances. AI recommendations personalize offers but may miss nuanced traveler needs, so balancing automation with a human touch is essential.

Automation trends aim to optimize efficiency and reduce costs, but combining AI speed with human expertise addresses both simple and complex queries. The lower chatbot ranking reflects ongoing demand for human-centered service.

Respondents generally agree that interactive tourism tech is significant (composite mean 3.48) but see room for improvement to maximize engagement. Booking, chat, and social media enhance convenience and decision-making via real-time help and personalized advice ^[28]. Hybrid AI-human approaches remain important.

User-generated content strengthens interaction by allowing tourists to share experiences and influence others, increasing trust and engagement. Automated responses support personalization and loyalty but may feel impersonal, emphasizing the need for adaptive, human-focused AI systems.

9.5. Behavioral intention in terms of revisit intention

The behavioral intention of tourists, specifically revisit intention, is critical for the sustainability of tourism destinations. Revisit intention reflects tourists' likelihood to return based on prior experiences. Smart tourism technologies enhance revisit intention by providing seamless accessibility, personalized experiences, interactive services, and reliable information. Tourists tend to revisit destinations offering convenience, engagement, and satisfaction through digital innovations, making these technologies essential in travel planning and decision-making.

The highest-rated factor influencing revisit intention (weighted mean 3.54, "Strongly Agree") is the accuracy of information on the resort's social media page. Tourists value accurate, reliable, and current information from social media, which reduces uncertainty and builds confidence. Reliable information fosters security and trust, increasing repeat visits and long-term loyalty.

Accurate information is key to building trust in the digital age, where travelers rely heavily on online content. Studies show tourists depend on truthful details about accommodations and attractions, with misinformation causing doubts and dissatisfaction ^[27]. Providing transparent and consistent content strengthens emotional connections and repeat business.

Resorts prioritizing digital accuracy build strong reputations and manage expectations effectively, reducing negative experiences. Transparent communication increases brand loyalty by aligning with traveler needs, thereby fostering long-term customer relationships and positively influencing revisit intention ^[28].

The lowest-rated factor (weighted mean 3.50, "Strongly Agree") is the influence of interactive features on social media (e.g., live chats, polls). While these features foster engagement and emotional connection, tourists may prioritize other factors like information accuracy or overall resort quality when deciding to return. Usage of interactive features may also vary across demographics, affecting their perceived importance ^[29].

Despite this, interactive features enhance customer experience and brand attachment, providing personalized communication and real-time responses. However, tourists may view comfort, convenience, and service quality as more critical to revisit intention than interactivity alone^[30].

The composite mean of 3.52 (“Strongly Agree”) shows strong consensus that smart tourism technology significantly influences revisit intention. Social media’s role in maintaining tourist relationships beyond initial visits reinforces loyalty and positive perceptions^[27]. Accessibility, credibility, and interactivity of digital platforms reduce uncertainty, enhance confidence, and encourage repeat visits^[28–30].

9.6. Behavioral intention in terms of word of mouth

The behavioral intention of tourists to engage in word-of-mouth (WOM) communication is greatly influenced by smart tourism technology, which shapes their willingness to share experiences both online and offline. Positive travel experiences, supported by seamless digital interactions and personalized services, enhance tourists’ likelihood of recommending a destination^[32]. Tourists who share their stories online contribute to the destination’s reputation and long-term sustainability by attracting new visitors^[33].

Social media’s influence on WOM behavior is evident, with tourists motivated to share positive resort experiences via platforms like Facebook, Instagram, and TikTok. The quality of the digital environment—including visual appeal, interactivity, and responsiveness—plays a crucial role in encouraging user-generated content, which acts as authentic and trusted promotion^[34]. Active social media strategies that engage and recognize users create a feedback loop, fostering emotional connections and stronger brand advocacy^[35].

Furthermore, advanced technological services such as mobile check-ins and AI-powered concierge systems enhance convenience and efficiency, which tourists highly value. When combined with an engaging social media presence, these technologies encourage more positive WOM and repeat visits^[36]. Digital WOM marketing leverages peer-generated content that travelers trust more than traditional advertising, thus amplifying marketing effectiveness^[37].

Overall, the integration of smart tourism technology and social media platforms significantly boosts tourists’ willingness to share experiences, reinforcing customer satisfaction, loyalty, and destination promotion.

9.7. Behavioral intention in terms of willingness to pay more

The behavioral intention of tourists in terms of willingness to pay more is examined, highlighting how smart tourism technology influences consumers’ perceived value of a resort. As digital advancements enhance service quality, convenience, and engagement, travelers may be more inclined to spend extra for premium experiences. Studies suggest that features such as seamless booking systems, interactive platforms, and personalized recommendations significantly increase customer satisfaction, leading to a greater willingness to invest in enhanced services.

The findings indicate that tourists generally agree that smart tourism technology influences their willingness to pay more, with a composite mean of 3.34–3.35. The highest-rated indicator, with a mean of 3.35, suggests that tourists find the resort’s advanced social media features justify the higher price of services. This aligns with recent adaptations of the Technology Acceptance Model (TAM), which emphasize that perceived usefulness and ease of use significantly impact consumers’ acceptance of digital innovations in tourism^[32–33]. Recent studies also confirm that digital enhancements, such as AI-driven customer support and real-time engagement, significantly improve the perceived value of hospitality services^[34]. When resorts invest

in technology-driven social media platforms, they create an immersive experience that enhances tourists' willingness to spend more.

With a mean of 3.34, several indicators suggest that social media and smart tourism technology influence pricing perception. One major factor is social media's role in facilitating ease of use, making the resort more appealing despite higher costs. Research by Buhalis and Sinarta highlights how smart tourism ecosystems enhance customer engagement, making travelers more open to premium pricing structures ^[35]. Additionally, travelers are willing to pay more when they perceive convenience and digital integration as an added value ^[36]. This reflects a broader trend in which consumers prefer businesses that leverage digital solutions to enhance the travel experience and reduce effort in decision-making ^[37].

Similarly, social media visual content and high-tech representations of resorts influence price sensitivity. A weighted mean of 3.34 for the statement on paying more after seeing social media images of high-tech features supports findings from studies on digital marketing's impact on perceived value ^[38]. Visual content fosters a sense of exclusivity, which plays a critical role in tourists' willingness to pay a premium ^[39]. Social media posts that highlight luxurious amenities, AI-driven services, and smart room technology create a perception of sophistication and exclusivity, leading consumers to justify higher expenses ^[40]. Resorts that effectively utilize digital storytelling and interactive content are more likely to influence spending behaviors, making technology-driven marketing an essential factor in pricing strategies.

The composite mean of 3.34, interpreted as "Agree," indicates that tourists generally recognize the value of smart tourism technology in shaping their willingness to pay more for resort services. While they may not strongly commit to paying a premium, they acknowledge that digital innovations and social media features positively influence their perception of the resort's pricing. This aligns with the perceived value theory, which suggests that consumers are more likely to justify higher costs when they perceive added benefits in convenience, exclusivity, and enhanced experience ^[41]. Recent studies emphasize that smart tourism technology, such as AI-powered chatbots, immersive virtual experiences, and seamless booking systems, contributes to a more effortless and satisfying tourist experience, thereby increasing their acceptance of premium pricing ^[37-38].

Several factors contribute to tourists' moderate agreement with paying more for a resort due to its technological features. First, social media platforms allow resorts to highlight high-tech services, such as smart room controls, AI-driven concierge services, and real-time digital assistance, which improve tourists' perception of value ^[40]. When travelers see these innovations promoted through engaging social media content, they develop higher expectations for service quality and are more inclined to justify increased prices ^[35]. Additionally, studies suggest that personalized digital marketing, including AI-curated recommendations and targeted promotional campaigns, plays a role in influencing purchasing decisions and pricing acceptance ^[39].

However, the moderate agreement reflected in the composite mean suggests that while technology enhances the travel experience, it does not necessarily guarantee a willingness to pay significantly more. Factors such as perceived affordability, competitor pricing, and overall economic considerations may affect tourists' spending decisions ^[36]. Furthermore, while digital advancements add convenience, some travelers may still prioritize traditional service elements such as customer service, physical amenities, and location over purely digital features ^[34]. Therefore, while smart tourism technology positively influences pricing perception, its impact is dependent on how well resorts integrate technology with exceptional service quality and guest satisfaction.

10. Proposed action plan explanation

To enhance smart tourism accessibility, the primary objective is to improve the digital accessibility of resorts for both local and international tourists. This will be achieved by improving the mobile responsiveness of websites and social media platforms and developing multilingual support features. These strategies aim to create more inclusive and user-friendly digital interfaces, ensuring tourists from diverse backgrounds can easily access information and services. The timeline for these improvements is short-term (0–6 months), and success will be measured by increased user satisfaction, higher engagement rates, and improved accessibility ratings.

The personalized travel experience program focuses on providing customized travel experiences through smart technologies. This initiative will utilize AI-powered chatbots and recommendation systems, alongside data-driven personalization based on tourist behavior. These strategies are designed to create tailored customer journeys that meet individual preferences and needs. Planned for the medium term (6–12 months), the expected outcomes include higher customer satisfaction scores and increased AI-assisted bookings, ultimately leading to greater tourist engagement.

Strengthening digital marketing and social media engagement is crucial to increasing the digital visibility of resorts and enhancing tourist interaction. This will be accomplished by creating interactive campaigns leveraging user-generated content (UGC) and training resort staff in digital marketing techniques. The short-term timeline (0–6 months) for this strategy targets measurable improvements such as a rise in social media shares, positive customer testimonials, and enhanced digital marketing metrics. These efforts aim to build a stronger online presence and boost brand recognition for the resorts.

The customer loyalty and revisit incentive program seeks to encourage repeat visits and foster long-term customer relationships. Key strategies include launching membership and rewards programs, as well as offering exclusive VIP packages to returning guests. This program, scheduled for medium-term implementation (6–12 months), is expected to result in growth in repeat bookings, increased loyalty membership, and higher retention rates, which collectively strengthen brand loyalty and revisit intentions.

To boost tourists' willingness to pay more for innovative digital experiences, the premium smart tourism services initiative will introduce advanced technologies such as augmented reality (AR), virtual reality (VR) features, smart rooms, and seamless booking platforms. Additionally, exclusive bundles incorporating these smart services will be developed. Scheduled over the medium to long term (12–18 months), these efforts aim to increase bookings for premium packages and improve willingness-to-pay survey scores, thereby increasing revenue and enhancing the perceived value of tourism services.

Improving digital informativeness and transparency is essential for building customer trust and providing clear, real-time resort information. This will be achieved by offering real-time digital updates and creating a centralized digital information hub, ensuring tourists have easy access to accurate and timely details. Targeted for short-term implementation (0–6 months), these strategies are expected to enhance customer trust ratings, reduce inquiries, and boost booking confidence, resulting in more informed customers and smoother booking experiences.

Finally, the Smart Tourism Policy and Partnership Support area focuses on institutionalizing support for digital tourism initiatives to ensure sustainable development. This involves forging partnerships with local government units (LGUs), the Department of Tourism (DOT), and private sector stakeholders, as well as formulating enabling policies and guidelines. With a long-term timeline (18+ months), this approach aims to foster a robust ecosystem for smart tourism in Batangas, measured by the number of public-private partnerships

formed, policy adoption rates, and increased technological investment.

Together, these strategic initiatives form a comprehensive action plan that will strengthen Batangas' position as a smart tourism destination, enhancing both the visitor experience and sustainable tourism development.

11. Conclusion

The respondents were predominantly female, mostly within the adult age range, and primarily married, indicating a diverse and balanced demographic profile in the study.

Respondents strongly agreed that smart tourism technology attributes—especially accessibility and informativeness—significantly enhanced their overall travel experience.

Overall, respondents showed a positive behavioral intention toward the resort, with the strongest agreement seen in revisit intention and word-of-mouth recommendations, while willingness to pay more received comparatively lower agreement.

Tourists generally expressed a strong desire to revisit the resorts and to recommend them to others through word of mouth.

The significant positive relationship between smart tourism technology attributes and behavioral intention suggests that improving digital features can foster greater tourist engagement, loyalty, and repeat visits.

Based on these findings, a targeted action plan has been proposed to enhance the implementation of smart tourism technologies in Batangas Province, with tourism strategies tailored to meet the preferences and needs of the predominant demographic—female, married travelers aged 28 to 43.

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