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Decoding tourist experiences in the digital age: An introductory guide to conducting interviews in smart tourism research

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Abstract: This paper introduces a comprehensive interview guide aimed at enhancing smart tourism research. It discusses the integration of digital technology in tourism, highlighting the importance of understanding tourists' experiences in this evolving landscape. By focusing on qualitative research through interviews, the study delves into tourists' perceptions, attitudes, and behaviors toward technology in tourism. It underscores the necessity of a flexible and thorough interview guide for capturing the complexities of digital transformation in the tourism industry and providing valuable insights for improving smart tourism experiences. This research contributes to the academic discourse on smart tourism, offering a systematic approach to exploring technology's impact on tourism and suggesting future research directions to enrich the field further.

Keywords: smart tourism; qualitative research; technology integration; tourist experiences; sustainability; interview guide

1. Introduction

To better understand the intricate interplay between growing technology and tourist experiences, developing a comprehensive interview guide specifically intended for smart tourism research is necessary. Integrating new digital technology into the tourism industry is causing substantial transformations in traditional tourism experience paradigms. These technologies include AI, VR, AR, and the Internet of Things (IoT) [1,2]. These technologies offer unprecedented personalization, efficiency, and engagement, fundamentally transforming the visitor experience. As a result, there is a tremendous need for research methods to capture these complicated interactions and tourists' subjective experiences in this digital age digitalization [3,4].

The importance of developing a realistic interview guide for smart tourism research goes far beyond the academic setting. Regarding smart tourism, digital technologies are more than just supplemental tools; they are essential in developing immersive and engaging tourist experiences [5]. An example would be using artificial intelligence and machine learning algorithms to provide tourists with personalized recommendations based on their preferences and previous behaviors, thereby improving the overall experience [1,6]. Similarly, virtual reality (VR) and augmented reality (AR) technologies allow for immersive experiences that transport tourists to virtual environments or enrich the physical world with digital overlays [7]. It opens up new opportunities for tourists to explore cultural treasures and destinations.

The transition to smart tourism has not been easy. Several significant topics must be investigated, including tourist acceptance and use of new technologies, the impact of these technologies on tourism's social and cultural components, and concerns about digital privacy and security. Qualitative research conducted through interviews [7] is

critical for thoroughly understanding tourists' perspectives, attitudes, and behaviors regarding this technology. Interviews allow researchers to dive into the human and emotional sides of tourists' experiences, providing them with unique insights that are not readily available when conducting research using only quantitative methodologies [8].

To develop a helpful interview guide, various factors must be carefully considered. Identifying key subject areas relating to smart tourism is critical. Examples of these categories include technological adoption, experience personalization, and sustainability [9]. The guide should include open-ended questions that allow for detailed narratives and reflections. However, the questions should be framed to address all relevant components of smart tourism. Furthermore, the guide must be adaptable to several settings and demographics, allowing it to be used in a wide range of smart tourism research applications [10].

Ethical considerations are critical to this interview practice. It is crucial to adhere to essential ethical conventions such as maintaining participant confidentiality and anonymity, obtaining informed consent, and being sensitive to the nuances of various cultures. Considering these variables is critical to building trust with participants and enabling them to disclose their ideas and experiences openly [11,12].

This research aims to provide a flexible and thorough interview guide that can serve as a foundation for qualitative research in smart tourism. The guide aims to deepen the academic discourse on smart tourism by facilitating a systematic yet flexible approach to investigating the many effects of technology on tourism and providing industry stakeholders with actionable insights [13]. Developing such a guide is necessary to better understand how digital technologies affect tourist experiences and the implications for travelers, service providers, and destinations.

However, developing a practical interview guide for smart tourism research is significant in navigating the complexities of digital change in the tourism industry. This guide can be essential for conducting smart tourist research. By providing a formal framework for qualitative inquiry, this guide may enable researchers to capture technology's multifaceted impacts on tourist experiences. This, in turn, can provide helpful insights that can be utilized to improve the design, delivery, and sustainability of smart tourism experiences, contributing to the ongoing evolution of the tourism business in the digital era [14].

2. Literature review

Previous studies, e.g., Sustacha et al., Gelter et al., and Kontogianni and Alepis [2,9,13] in the domain of smart tourism have provided valuable insights into how technology reshapes the tourism landscape, yet they also reveal significant gaps that warrant further exploration. These studies have primarily focused on understanding the integration of various technologies—such as Big Data, the Internet of Things (IoT), Artificial Intelligence (AI), and mobile applications [6]—in enhancing the tourist experience. A common methodology in this research focuses on quantitative data analysis, often relying on large datasets to discern patterns in tourist behavior and preferences about technology use. For instance, most studies employ statistical techniques to analyze user-generated content on social media platforms and review

sites [15], providing insights into tourists' perceptions and experiences with smart tourism technologies. Other research has focused on the operational side, examining how tourism providers utilize technology for service optimization and personalized offerings [16].

Despite these advancements, there are noticeable gaps in the existing research. One such gap is the lack of in-depth qualitative studies that delve into the subjective experiences and perceptions of individuals engaging with smart tourism technologies. While quantitative methods provide broad overviews of trends and patterns, they often fall short of capturing tourists' nuanced, context-specific experiences [9]. For example, there is a need for more interactive research and in-depth case studies that explore how different demographic groups perceive and interact with smart tourism technologies in various cultural and geographical contexts. Another gap lies in the exploration of the long-term implications of technology on tourism dynamics, including sustainability issues, the digital divide, and the impact on local communities and cultures [17].

Additionally, there is a scarcity of comparative studies that examine the differential impacts of various smart tourism technologies and the interplay between multiple technologies in shaping tourist experiences [9,15]. This gap indicates a need for a more holistic approach to research in smart tourism, one that not only evaluates the effectiveness of individual technologies but also understands their collective impact within the broader tourism ecosystem. Addressing these gaps through diverse research methodologies and approaches may enrich the academic discourse on smart tourism and provide practical insights for stakeholders aiming to navigate the complexities of this rapidly evolving field [18].

The role of interviews in tourism research, particularly in the context of smart tourism, is paramount due to their capacity to yield in-depth, qualitative insights that complement and often deepen the understanding derived from quantitative methods. Interviews, as a qualitative research tool, allow for a more nuanced exploration of individual experiences, perceptions, and attitudes [19,20], which are crucial in understanding the complex dynamics of tourist behavior and preferences in an increasingly technology-driven industry [11].

Comparatively, while quantitative methods such as surveys, statistical analysis, and data mining provide valuable broad-scale data on trends, patterns, and general attitudes, they often lack the depth and contextual richness that interviews can offer [4].

Quantitative research is excellent for answering 'what' and 'how much' questions, providing a macro-level view of tourist behavior and technology usage. However, it typically falls short in addressing the 'why' and 'how'—the underlying motivations, feelings, and personal narratives that shape tourist experiences. Interviews bridge this gap by allowing researchers to delve deeper into personal storytelling [2,4,7], often subjective aspects of the tourism experience. Through open-ended questions and a flexible structure, interviews encourage respondents to share detailed stories, experiences, and viewpoints, revealing the subtleties and complexities of their interactions with smart tourism technologies and services [6].

Insights gained from interview-based studies in tourism research are manifold. They provide a rich understanding of tourism's experiential and emotional dimensions, which are critical in designing and evaluating smart tourism technologies and services. For instance, interviews can uncover the reasons behind tourists' preferences for certain technologies, their satisfaction or dissatisfaction with digital services, and their concerns regarding privacy and data security [8]. Such insights are invaluable for technology developers and tourism operators as they strive to create more user-centric, responsive, and responsible smart tourism solutions.

Furthermore, interviews can reveal social and cultural dynamics that influence technology adoption and usage in tourism, providing a more holistic understanding of the interplay between technology [13], individual behavior, and the broader social context. This deeper understanding is essential not just for academic advancement but also for practical applications in tourism management and policy-making, ensuring that the development and implementation of smart tourism initiatives are both practical and sensitive to the diverse needs and expectations of tourists [9].

3. Methodology for smart tourism research

3.1. Research questions

In the domain of smart tourism research, identifying key research questions is a crucial step that sets the direction and focus of the study. These questions should be carefully crafted to align with the overarching objectives of the research, ensuring that the study remains relevant and impactful. Given the multifaceted nature of smart tourism, the research questions often revolve around three primary areas: technology adoption, user experience, and sustainability [21,22].

Technology adoption:

Research in this area explores how and why tourists adopt certain technologies. Questions might include: What factors influence tourists' decisions to use smart tourism technologies? How do demographic variables (such as age, gender, and cultural background) affect technology adoption in tourism? This line of inquiry helps in understanding the barriers and facilitators to technology uptake and can guide the development of more user-friendly and accessible smart tourism solutions [13,23].

User experience:

This aspect explores how tourists interact with technology during their travel experiences. Key questions could be: How do smart tourism technologies enhance the quality of tourist experiences? [24,25]. What are tourists' perceptions and attitudes towards these technologies? Understanding the user experience is vital for evaluating the effectiveness of smart tourism technologies and identifying areas where improvements are needed [5].

Sustainability:

In this context, research questions focus on the impact of technology on sustainable tourism practices. Questions might include: How do smart tourism technologies contribute to or detract from sustainable tourism development? What are the environmental, economic, and socio-cultural implications of deploying these technologies in tourist destinations? These questions are crucial in ensuring that the

advancement of smart tourism does not compromise the principles of sustainability [12,26,27].

3.2. Research objectives

It is essential that the research questions are aligned with the study's objectives. For a study to enhance the design of smart tourism technologies, questions should focus on user experience and technology adoption. If the objective is to inform policy-making, questions should explore the broader implications of technology on sustainable tourism development and local communities [28]. The alignment ensures that the research provides relevant and actionable insights, contributing meaningfully to smart tourism. This strategic alignment not only maximizes the impact of the research but also ensures that the study addresses the most pressing issues and opportunities in the field of smart tourism [29].

3.3. Designing the interview structure

Designing the interview structure is a critical aspect of qualitative research in smart tourism, as it significantly influences the depth and quality of the information gathered. A well-structured interview guide should balance open-ended and closed-ended questions and ensure a logical progression that facilitates a natural and comprehensive topic exploration [30].

Open-ended vs. closed-ended questions:

These are essential for qualitative interviews as they allow respondents to express their thoughts, experiences, and feelings in their own words, providing more prosperous, more nuanced data. In the context of smart tourism, open-ended questions could explore personal experiences with smart tourism technologies, perceptions of how these technologies enhance or detract from the tourism experience, and suggestions for improvement [19]. For instance, a question like "Can you describe a memorable experience you had using a smart tourism application?" invites detailed responses and personal narratives. These questions are helpful in obtaining specific information and are easier to quantify. They can be particularly effective in establishing basic demographic information, specific preferences, or behavior frequencies [31]. For example, asking, "How often do you use mobile applications for planning your travel?" with set response options provides clear, concise data that can be easily analyzed. However, over-reliance on closed-ended questions may limit the depth of understanding [32].

Ensuring flow and logical progression:

The interview should begin with simple, non-threatening questions to build rapport and put the respondent at ease. These might include basic demographic or general questions about travel habits [27,33]. Gradually transition to more specific questions about smart tourism technologies. This progression should feel natural, guiding the respondent from broader travel experiences to specific interactions with technology [34]. The heart of the interview should explore the core research areas in-depth. Here, open-ended questions are crucial to eliciting detailed responses about user experiences, perceptions, and attitudes toward smart tourism technologies.

Concluding with questions that allow respondents to reflect on their overall experience or provide additional comments is significant. This ensures a comprehensive understanding of their perspectives and ends the interview on a reflective note [16]. A well-designed interview structure for smart tourism research should be flexible enough to adapt to the flow of conversation yet structured enough to ensure that all key topics are thoroughly explored. This balance is crucial for gathering rich, insightful data that can inform the development and implementation of smart tourism initiatives [31].

3.4. Components of the interview guide

The introduction section of an interview guide, particularly in the context of smart tourism research, plays a crucial role in setting the stage for a productive and ethically sound interaction. This section is not just about introducing the topics of discussion but also about creating a comfortable and respectful environment for the respondent [34,35].

Beginning by clearly explaining the aim of the interview is the first step. This involves articulating how the interview contributes to the broader research on smart tourism. For instance, the researcher might say, "This interview is part of a larger study aiming to understand how travelers like yourself interact with and perceive the technologies that are increasingly becoming a part of the tourism experience" [36].

The second step is to provide an overview of the topics that will be covered during the interview. This gives the respondent a clear idea of what to expect and helps to focus the discussion. For example, "We will discuss your experiences with various smart tourism technologies, including mobile apps, AI services, and virtual reality experiences in tourism settings" [35,36].

3.5. Establishing rapport and ethical considerations

Establishing rapport at the beginning of an interview is crucial for fostering a successful and productive interaction. This can be achieved through engaging in light, friendly conversation or showing genuine interest in the respondent's viewpoints [28]. Such an approach sets a relaxed and comfortable tone, paving the way for open and honest communication. Building this connection is not just about easing into the interview [37,38]; it is about creating an environment where respondents feel valued and understood, encouraging them to share their thoughts and experiences more freely. Moreover, the initial interaction is the foundation for a rapport built on mutual respect and trust, essential for obtaining genuine and in-depth responses [14].

Simultaneously, it is imperative to integrate ethical considerations from the outset. This involves ensuring that respondents are fully aware of the research's purpose and what their participation involves. They should be informed of their voluntary participation, with the assurance that they can withdraw at any stage without any repercussions [15,28,39]. Additionally, it is vital to guarantee the confidentiality of their responses, with a commitment to anonymizing any identifying information in subsequent reports or publications. When sensitive topics arise, acknowledging this sensitivity and reassuring the respondent to carefully handle such information is critical [7]. This ethical framework not only upholds the integrity of the research but

also reinforces the respondent's trust and comfort, contributing significantly to the depth and quality of the ensuing dialogue. The introduction, therefore, is more than a procedural commencement; it is an essential phase for establishing the groundwork for a meaningful, ethical, and insightful exchange [8,40].

3.6. Developing interview questions

In smart tourism research, crafting interview questions is pivotal for acquiring in-depth insights into the intricacies of technology integration, user interaction, and sustainability in the tourism sector. These questions, extending beyond the core areas, are designed to comprehensively explore tourists' diverse experiences and perceptions [19]. They offer a detailed view of the complex relationship between technology and tourism and are vital in uncovering the broader implications of technology in this evolving field [33,41]. **Table 1** below categorizes these interview questions into thematic areas, with each section encompassing a wide spectrum of queries, ranging from general to specific, and supplemented by probing questions to encourage deeper reflection and detailed responses [42].

Table 1. Categorization of interview questions into thematic areas as an example.

Thematic area	Interview questions	Probing questions
Technology Integration	1. How do you use technology during travel planning and experiences?	What specific features of these technologies do you find most beneficial or challenging?
	2. Can you describe specific instances where technology significantly enhanced or detracted from your travel experience?	
	3. How do you perceive the role of emerging technologies like AR and VR in enhancing travel experiences?	How do these technologies change your interaction with the destination?
User Interaction	1. What are your thoughts on the ease of use and accessibility of the smart technologies you have encountered during your travels?	
	2. Can you share experiences where smart tourism technology provided personalized and relevant information or recommendations?	
	3. How do social media and online platforms influence your travel decisions and experiences?	Can you explain how online content changed your travel plans or expectations?
Sustainability	1. In your opinion, how do smart tourism technologies impact environmental, cultural, or economic sustainability in tourist destinations?	How do you think these technologies could be better designed to support sustainable practices in tourism?
	2. Can you recall any smart technologies that influenced your behavior towards more sustainable tourism practices?	
	3. What are your views on the balance between technological advancement and preserving natural and cultural heritage in tourist destinations?	How can technology be used to educate tourists about sustainability issues?

In the technology integration area, the questions delve into how tourists are using technology in planning and experiencing their travels and how emerging technologies like augmented and virtual reality are reshaping these experiences [34]. These questions aim to unravel the depth of technology's impact on travel, from planning stages to in-destination experiences. The probing questions are designed to elicit specific examples and opinions, offering insights into the practical application and reception of these technologies [40].

The user interaction theme expands the exploration to include the influence of social media and online platforms on travel behavior. This aspect is increasingly relevant as digital platforms become integral to the travel experience, influencing decisions and expectations. The questions here seek to understand the extent of this influence and the nuances of how travelers interact with and perceive the technology they encounter [43].

In the area of sustainability, the queries extend to the broader implications of smart tourism technologies on environmental, cultural, and economic aspects. These questions are critical in the current context, where the balance between technological progress and sustainable practices is paramount [5]. The focus is on understanding tourists' perspectives on how technology can be harnessed to support sustainability goals and how it affects their own behavior towards responsible tourism [44]. Overall, through a comprehensive set of questions, these thematic areas aim to provide a thorough understanding of the multifaceted role of technology in tourism. The approach ensures a holistic exploration of tourists' interactions with and perceptions of smart tourism technologies, yielding valuable insights to inform future research and development in this dynamic field [24].

3.7. Concluding section and pilot study

The concluding section and the pilot study in smart tourism research are integral to the success and integrity of the research process. **Table 2** below provides a more detailed overview of the key components of these phases, highlighting their importance and role in enhancing the research [32,45].

Table 2. Concluding section and pilot study.

Phase	Component	Description
Concluding section	Gathering feedback on the interview process	• Assessing the interview experience: Inquiring about the respondent's comfort level, engagement, and overall impression of the interview. • Additional insights: Encouraging respondents to discuss any unexplored topics or new ideas they believe are relevant to the study.
	Expressing gratitude and discussing the next steps	• Expressing gratitude: Showing appreciation for the time and insights provided by the respondents. • Discussing next steps: Clarifying how the responses will be analyzed and used in the study. • Maintaining contact: Offering opportunities for respondents to stay informed or engaged with the research outcomes.
Pilot study	Testing the interview guide with a small sample	• Selection of sample: Including participants with diverse backgrounds and experiences relevant to smart tourism. • Conducting the interviews: Simulating the actual interview environment to assess the guide's effectiveness. • Observation and note-taking: Monitoring both verbal and non-verbal responses.
	Identifying areas for improvement	• Feedback from participants: Soliciting detailed feedback on the content, length, and pacing of the interview. • Analyzing responses: Evaluating the depth and quality of responses elicited by each question. • Refinement of the guide: Enhancing question-wording and order for clarity and flow.

The concluding section plays a critical role in validating the research process. Gathering feedback on the interview process not only helps in assessing the effectiveness of the interview but also empowers respondents by valuing their opinions on the process [10]. This feedback is crucial for identifying areas where the interview

could be more engaging or insightful [19]. Additional insights gathered at this stage can open new avenues for research, ensuring comprehensive coverage of the topic [46]. Expressing gratitude for participants' involvement is essential in fostering a positive relationship, which can be beneficial for future research engagements. Discussing the next steps, including how their input will be utilized and the potential for further communication, helps in maintaining transparency and building trust [21,47].

The pilot study is an essential precursor to the main research. By testing the interview guide with a small, diverse sample, researchers gain valuable insights into the guide's effectiveness across different demographics and perspectives. This phase is critical for ensuring the questions are clear, relevant, and unbiased. Feedback from participants in the pilot study is invaluable for identifying any shortcomings in the interview guide, such as questions that are too complex, leading, or irrelevant [22]. Analyzing responses helps in understanding the types of answers each question elicits, allowing researchers to fine-tune the guide for better clarity and engagement [48]. The refinement process includes adjusting the wording, order, and type of questions to ensure they effectively capture the depth and breadth of the research topic. A well-refined interview guide is a cornerstone of effective research, facilitating the collection of rich, insightful data that significantly contributes to the understanding of smart tourism [37,49].

3.8. Ethical considerations in conducting interviews

Ethical considerations, such as informed consent and cultural sensitivity, are crucial in conducting interviews, especially in diverse fields like smart tourism research. **Table 3** below details these ethical considerations, encompassing various aspects of conducting ethical research.

Table 3. Ethical considerations in conducting interviews.

Ethical aspect	Component	Extended description
Informed consent	Explaining the study and obtaining consent	• Clear explanation of the study: Providing detailed information about the research objectives, processes, and potential impacts. • Voluntary participation: Emphasizing the voluntary nature of participation and the right to withdraw at any stage. • Obtaining consent: Securing either written or verbal consent after ensuring understanding.
	Ensuring confidentiality and anonymity	• Confidentiality: Assuring the secure handling and confidentiality of provided information. • Anonymity: Implementing measures to anonymize participant data in outputs. • Data usage: Clearly communicating how data will be used during and after the study, including future research or sharing with third parties.
Cultural sensitivity and adaptation	Tailoring questions to diverse backgrounds	• Understanding cultural contexts: Adapting language and content to be culturally relevant and comprehensible. • Inclusive question design: Creating questions that are culturally neutral and inclusive. • Language considerations: Using simple language or employing translators for non-native English speakers.
	Respecting cultural nuances in responses	• Active listening and respect: Being attentive to and respectful of cultural nuances in responses. • Avoiding cultural assumptions: Interpreting responses without cultural bias. • Handling sensitive topics: Approaching culturally sensitive topics with care and readiness to adapt the discussion.

The informed consent process is foundational in ethical research, particularly in smart tourism studies involving diverse human participants. This process entails not just obtaining consent but ensuring that participants are fully informed about the study's purpose, methodology, and potential implications [40]. This transparency is crucial for building trust and maintaining the integrity of the research. The emphasis on voluntary participation and the right to withdraw at any stage upholds the autonomy of the participants [42]. Moreover, guaranteeing confidentiality and anonymity is paramount to protecting participants' privacy and encouraging candidness in their responses. Researchers must also be explicit about how the data collected will be used, stored, and potentially shared, ensuring participants are aware of and agreeable to these uses [47].

Cultural sensitivity and adaptation are imperative in smart tourism research, given the field's inherent diversity. Researchers must ensure that their methodology and questions are tailored to respect and accommodate different cultural backgrounds. This involves not only adapting the language and examples used in the questions but also ensuring that the questions are culturally neutral and inclusive [1]. Researchers need to be mindful of the varying communication styles and be prepared to interpret responses within the correct cultural context, avoiding any personal cultural biases. Handling culturally sensitive topics with care is essential to maintaining a respectful and ethical dialogue [39]. By being culturally sensitive and adaptable, researchers can foster a more inclusive and comprehensive understanding of the diverse perspectives and experiences of participants, enriching the quality and authenticity of the research in smart tourism [5].

4. Conclusion

The refinement and deployment of a meticulously designed interview guide mark a substantial advancement in smart tourism research. This tool is pivotal in capturing in-depth, qualitative data, which is indispensable for an all-encompassing exploration of this dynamic field [20]. The interview guide is instrumental in uncovering the subtle aspects of tourist experiences, perceptions, and attitudes towards the integration of technology in tourism, areas that often remain underexplored in quantitative studies. It adeptly navigates through complex themes, including the personalization of tourist experiences, emerging privacy concerns, and the broader social implications of technology within the tourism sector [30,41]. The rich insights gleaned from these interviews are invaluable, as they not only guide the development of more tailored, user-focused smart tourism technologies and strategies but also significantly elevate the overall tourist experience. Moreover, these qualitative insights serve to complement and deepen the understanding derived from quantitative data, fostering a more rounded and insightful perspective on the smart tourism phenomenon [38].

The role of the interview guide in shedding light on the evolving relationship between technology and tourism is profound. It facilitates a deeper comprehension of the nuanced ways tourists interact with and perceive an array of smart technologies, ranging from mobile applications and artificial intelligence to the Internet of Things and virtual reality [18]. This understanding is particularly crucial in an era marked by rapid technological advancements and the increasing integration of these innovations

into the tourism experience. The guide not only highlights the advantages but also uncovers the challenges and limitations that accompany the adoption of technology in tourism. It offers insights into critical issues such as the digital divide, the accessibility of technology, and the sustainability of tech-driven tourism practices. Providing a voice to tourists, the interview guide significantly enriches their understanding of the intricate interplay between technology and tourism. This enhanced knowledge is of paramount importance to a wide range of industry stakeholders, including tourism operators, technology developers, and policymakers, as they strive to integrate technology into tourism in ways that are beneficial, sustainable, and inclusive (**Table 4**).

Table 4. A practical interview guide for smart tourism research.

Step	Description	Key points	Elaborative examples
1. Comprehensive field understanding	Gain an in-depth understanding of smart tourism, encompassing its technological and experiential aspects.	• Extensive literature review. • Identify new and unexplored areas in smart tourism.	• Analyze scholarly articles on AI in tourism. • Study real-world examples like smart city tourism initiatives.
2. Specific research objectives	Define precise, researchable objectives tailored to smart tourism.	• Objectives should be clear, measurable, and aligned with smart tourism themes.	• "Investigate the impact of AR on heritage site tourism experiences." • "Examine tourist satisfaction with smart hotel technologies."
3. Thorough interview guide development	Develop a comprehensive set of interview questions based on your objectives, covering various facets of smart tourism.	• Include a mix of question types. • Questions should cover technological aspects, user experiences, and impact on tourism.	• "How do AR technologies enhance your cultural site visits?" • "Describe your experience with personalized recommendations from travel apps."
4. Rigorous ethical practices	Uphold strict ethical standards in your research, especially when dealing with human subjects.	• Informed consent, confidentiality, and sensitivity to participant needs.	• Use a detailed informed consent form explaining the study's purpose. • Establish protocols for data anonymization and secure storage.
5. Strategic sampling approach	Formulate a sampling strategy that captures a wide range of perspectives within the smart tourism ecosystem.	• Include participants from different user groups and stakeholders in smart tourism.	• Interview tourists, app developers, and tourism policymakers. • Select participants from different age groups and cultural backgrounds.
6. Pilot study for refinement	Conduct a detailed pilot study to test and refine your interview guide.	• Adjust questions based on pilot feedback. • Observe the effectiveness of the interview flow.	• Conduct initial interviews with a few tourists and travel agents. • Refine questions for clarity and depth based on feedback.
7. Comprehensive interview execution	Execute in-depth interviews, ensuring a thorough exploration of each question.	• Detailed note-taking and recording. • Adaptability during interviews for follow-up questions.	• Record interviews for accuracy. • Probe deeper based on participant responses to uncover underlying motivations.
8. In-depth data analysis	Analyze the interview data meticulously to uncover patterns and insights.	• Use qualitative data analysis methods. • Identify themes related to smart tourism.	• Code and categorize responses into themes like "user experience" or "technological challenges."
9. Detailed report writing	Craft a detailed report of your findings, providing insights and implications for smart tourism.	• Organized presentation of methodology, findings, and discussion.	• Structure the report into sections, including methodology, detailed findings, and a discussion that ties back to the research objectives.
10. Effective results dissemination and application	Share your findings with the relevant audiences and discuss practical applications.	• Academic publishing, conferences, and industry outreach.	• Submit research to journals focused on tourism technology. • Present findings at tourism industry conferences and workshops.

Future research directions

The future trajectory of smart tourism research is set to unfold immense possibilities, particularly through the expansion of interview-based studies and the integration of these qualitative insights with quantitative data. Such a multidimensional approach promises not only a more nuanced understanding of the field but also the development of holistic and actionable insights [6]. The inclusion of a diverse array of participants, spanning various cultural, geographical, and socio-economic backgrounds, is essential. This diversity will enable a more comprehensive capture of the wide-ranging experiences and perceptions linked to smart tourism technologies, thereby enriching the field with global perspectives [17]. As technology continues to evolve, so must the focus of research, adapting to encompass emerging technologies like augmented reality, blockchain, and advanced AI within the tourism context. Delving into new themes, such as the impact of these technologies on local communities, ethical issues in smart tourism, and the balance between technology and sustainable tourism practices, is crucial. These areas of exploration will provide pivotal insights into the complex dynamics of smart tourism and its implications across different societal and environmental contexts [45].

Integrating qualitative data from interviews with quantitative findings is set to revolutionize smart tourism research, fostering a more comprehensive understanding of the phenomena at play. Adopting mixed-methods approaches, where qualitative insights complement and clarify the patterns observed in quantitative data, will significantly enhance the validity and reliability of research findings [36]. This method of data triangulation, juxtaposing interview findings with quantitative data, offers a robust platform for drawing well-rounded conclusions. Such an integrated approach is not just academically enriching; it has significant practical implications [5]. For instance, qualitative insights can be instrumental in shaping user-centric technology solutions in tourism, while quantitative data can underpin evidence-based policy decisions and strategic planning within the industry. In essence, the progression of smart tourism research, steering towards these methodological advancements [34], is poised not only to advance scholarly discourse but also to inform practical strategies and policies that will shape the future landscape of the tourism industry. By broadening the scope of interview-based studies and synergistically merging these insights with quantitative analyses, research in this field is uniquely positioned to tackle the intricate challenges and opportunities at the nexus of technology and tourism [35].

Conflict of interest: The author declares no conflict of interest.

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