

TITLE OF THE RESEARCH PROJECT

Sustainable Cultural Heritage Tourism: Exploring Tourist Perceptions and the Digital Dimension

SUPERVISORS

	First name	LAST NAME	University	Research Unit
Co-Supervisor	Chiara	Giachino	Univeristy of Torino	
Supervisor	Maria Elena	Aramendia Muneta	Universidad Pública de Navarra	Institute for Advanced Research in Business and Economics

Fields of study

Business, Marketing, Tourism, Consumer Behaviour

Requirements (academic background, languages...) needed to apply for this research topic

B2 English certify (Some knowledge of Italian and Spanish will be recommended but not necessary)
Quantitative methods provided.

5 main KEYWORDS

Sustainable tourism; Cultural Heritage, Digital Marketing; Consumer Behaviour; Quantitative Methods

ABSTRACT (250 words max.)

The concept of sustainability and sustainable tourism has often been neglected in previous research regarding tourists' understanding, which has mainly focused on the supply side of tourism and assumed a shared knowledge among all consumers. Most tourists tend to associate sustainable tourism solely with environmental factors and consider sustainability and sustainable tourism as separate concepts. However, recent environmental crises and technological advancements have significantly transformed the tourism sector, increasing the importance of social sustainability and encouraging accommodations to adopt sustainable practices. This study specifically explores the application of sustainable tourism principles to cultural tourism, highlighting the importance of preserving cultural heritage—such as historical sites, traditions, and cultural resources—along with environmental concerns. It aims to protect these assets for future generations to enjoy in equal or better conditions. Additionally, the research investigates tourists' perceptions of sustainability within cultural tourism and the critical role of digital technologies like mobile applications and online platforms in promoting sustainable behaviour,

facilitating eco-friendly bookings, and providing informative content about cultural sites. Digital marketing campaigns also play a key role in raising awareness among travellers about the significance of safeguarding cultural heritage. This study further examines how digital tools and marketing strategies impact consumer behaviour in sustainable cultural tourism, encouraging responsible travel choices. Ultimately, the goal is to foster a conscious and sustainable approach to cultural tourism that ensures the long-term preservation and enjoyment of cultural heritage worldwide.

Research aims and methodology

This study explores sustainable cultural tourism, emphasising the preservation of cultural heritage and its importance alongside environmental sustainability. It investigates how tourists perceive sustainability in cultural tourism and how digital technologies can promote sustainable practices, such as mobile apps informing visitors about cultural sites. Digital marketing campaigns also raise awareness about preserving cultural heritage. Understanding consumer behaviour in this context is a key aspect. Ultimately, the goal is to contribute to conscious and sustainable cultural tourism, preserving cultural heritage for future generations to enjoy optimal.

Moreover, this research aims to discover through the analysis of the destination image perceived by the visitor, whether tourists perceive the sustainable character of accommodations that are classified as such. The study proposes a framework to illustrate the current understanding of the concept by consumers and advocates for the creation of alternative perspectives and strategies to promote sustainable tourism more effectively. Ultimately, these efforts will lead to better-informed and conscious consumer.

To explore sustainable cultural tourism, the preservation of cultural heritage, and the integration of environmental sustainability, this study will adopt a mixed-methods approach. This approach combines qualitative and quantitative research methods to provide a comprehensive understanding of tourists' perceptions, consumer behaviour, and the effectiveness of digital technologies in promoting sustainable practices.

1. Literature Review

- **Objective:** To establish a theoretical foundation by reviewing existing research on sustainable cultural tourism, cultural heritage preservation, environmental sustainability, and the role of digital technologies in tourism.
- **Method:** Systematic review of academic journals, books, and reports to identify key themes, concepts, and gaps in the current knowledge.

2. Qualitative Research: Sentiment analysis

🔍 **Objective:** To analyse tourists' attitudes and feelings toward sustainability in cultural tourism and digital technologies through sentiment analysis of user-generated content.

🔍 **Data Sources:** Social media platforms (e.g., Twitter, Instagram), travel review websites (e.g., TripAdvisor), and online forums where tourists discuss their experiences related to cultural tourism.

🔍 **Data Collection:**

- **Data Scraping:** Collect relevant text data using web scraping tools or APIs from selected platforms.
- **Keywords and Hashtags:** Focus on posts and reviews that include specific keywords or hashtags related to sustainability, cultural heritage, and sustainable tourism practices.

📌 Data Analysis:

- **Preprocessing:** Clean the data by removing noise, such as stop words, special characters, and irrelevant content.
- **Sentiment Analysis Tools:** Use natural language processing (NLP) tools, such as VADER (Valence Aware Dictionary and Sentiment Reasoner) or TextBlob, to conduct sentiment analysis. These tools will classify the text as positive, negative, or neutral, and provide sentiment scores.
- **Topic Modeling:** Apply topic modeling (e.g., Latent Dirichlet Allocation, LDA) to identify key themes and topics within the collected data.
- **Emotion Detection:** Extend the sentiment analysis by detecting specific emotions (e.g., joy, anger, surprise) to gain deeper insights into tourists' emotional responses to sustainability efforts.

📌 **Outcome:** The sentiment analysis will reveal tourists' overall sentiment and key emotional drivers related to sustainable cultural tourism, providing insights into how they perceive sustainability efforts and the effectiveness of digital tools in promoting these practices.

3. Quantitative Research: Surveys

- **Objective:** To measure tourists' perceptions of sustainability in cultural tourism, the effectiveness of digital technologies in promoting sustainable practices, and the perceived destination image.
- **Sample:** A large, diverse sample of tourists who have visited cultural destinations and stayed in sustainable accommodations will be surveyed.
- **Data Collection:** An online survey will be designed with Likert scale questions to assess:
 - Tourists' perceptions of sustainability in cultural tourism.
 - Awareness and usage of digital tools (e.g., mobile apps) that promote sustainable practices.
 - Perceived sustainability of accommodations and its influence on destination image.
- **Data Analysis:**
 - **Descriptive Statistics:** To summarise the survey data and provide an overview of tourists' perceptions.
 - **Factor Analysis:** To identify underlying dimensions related to sustainability perceptions.
 - **Regression Analysis:** To examine the relationship between the perceived destination image, sustainability awareness, and consumer behaviour.

Relevance and added-value of the proposed research in relation to the current state of knowledge

The proposed research on sustainable cultural tourism is highly relevant and adds significant value to the existing body of knowledge. In recent years, the field of cultural tourism has seen a growing focus on sustainability, driven by the need to balance cultural heritage preservation with environmental protection. However, while much has been written about environmental sustainability, the integration of cultural sustainability—ensuring that cultural heritage is preserved and promoted alongside ecological efforts—remains underexplored.

This study addresses this gap by investigating how tourists perceive sustainability within the context of cultural tourism. Understanding tourists' perceptions is crucial because it directly influences their behavior and decision-making processes. By exploring this aspect, the research provides valuable insights into consumer behavior, which is essential for developing effective strategies to promote sustainable cultural tourism.

The study's focus on digital technologies, such as mobile apps and digital marketing campaigns, introduces a modern and practical approach to sustainability. In an increasingly digital world, leveraging technology to inform and educate tourists about the importance of cultural heritage preservation is a timely and innovative solution. This approach not only enhances the visitor experience but also encourages responsible and sustainable practices among tourists.

Moreover, the research's emphasis on the destination image and tourists' perceptions of sustainable accommodations contributes to a deeper understanding of the factors that influence consumer choices. By proposing a framework that illustrates the current understanding of sustainability among consumers, the study paves the way for the creation of alternative perspectives and strategies that can more effectively promote sustainable tourism.

Ultimately, the research aims to contribute to the development of a more conscious and informed tourist, who is aware of the importance of preserving cultural heritage for future generations. By addressing both cultural and environmental sustainability, this study offers a comprehensive approach to sustainable tourism that is essential for the long-term preservation of cultural heritage.

Interdisciplinary nature of the research together with the alignment with the CHORAL programme and complementarity expertise of the teams

This proposal goes in line with the Culture Heritage Hub of Enhancement and Dissemination of cultural and natural heritage, more specific with tourism and valorisation, communication and digitisation and how this might affect in heritage management.

The distinct yet complementary focuses of the two team members are essential for the success of this research.

1. **Supervisor (Management and Quantitative Data Focus):** the team brings a strong focus on management and quantitative data analysis, which is vital for assessing the effectiveness of sustainable practices from an operational standpoint. Their expertise in data-driven decision-making complements the director's focus by grounding the research in measurable outcomes and statistical analysis. This approach ensures that the research not only explores innovative digital solutions but also evaluates their impact on consumer behaviour and destination image through robust quantitative methods. Their management focus also helps in understanding how sustainable practices can be integrated into the broader strategic goals of tourism organisations.
2. **Co-Supervisor (Digitalisation and Methodologies Focus):** The team's expertise in digitalisation and advanced methodologies is crucial for integrating cutting-edge technology into the study. Their focus on digital tools, such as mobile apps and digital marketing strategies, aligns with the need to innovate and modernise sustainable cultural tourism practices. By leveraging their knowledge, the research can effectively explore how digital technologies can promote sustainable practices and enhance tourist experiences. Additionally, the team's methodological skills ensure that the research design is rigorous and capable of producing reliable and actionable insights.

Justification for Complementarity: The combination of these two perspectives creates a well-rounded research team. The director's focus on innovation through digitalisation ensures that the research remains forward-thinking and relevant in an increasingly digital world. At the same time, the second member's emphasis on management and quantitative data provides a practical and evidence-based foundation, ensuring that the research results can be applied in real-world settings. Together, they offer a comprehensive approach that balances theoretical innovation with practical implementation, ultimately contributing to more effective and sustainable cultural tourism practices.

Output plan including publication and dissemination activities

3-Year Research Plan with Publication and Dissemination Activities

Objective: This 3-year plan outlines the research activities, publication strategies, and dissemination efforts to ensure the findings on sustainable cultural tourism are widely shared with both academic and industry stakeholders.

Year 1: Research Foundation and Initial Data Collection (Torino + Pamplona)

1. **Months 1-3: Literature Review and Framework Development**
 - Conduct an in-depth literature review to establish the theoretical foundation.
 - Develop an initial research framework that integrates digitalization, methodologies, management, and quantitative data.
 - **Output:** Publish a review article in a peer-reviewed journal focusing on the state of sustainable cultural tourism, emphasising gaps in the integration of digital technologies.
2. **Months 4-6: Qualitative Research - Sentiment Analysis**

5/9

- Perform sentiment analysis on social media and travel review platforms to gauge tourists' attitudes toward sustainability in cultural tourism.
- Identify key themes and emotions related to sustainable practices.
- **Output:** Present findings at a national conference on tourism or digital humanities.
- 3. **Months 7-9: Quantitative Survey Design**
 - Develop and pilot an online survey to assess tourists' perceptions of sustainable practices, digital tools, and accommodations.
 - **Output:** Publish a research note or methodology paper detailing the survey design and preliminary findings in a relevant academic journal.
- 4. **Months 10-12: Case Study Selection and Initial Data Collection**
 - Identify cultural heritage sites and tourism destinations implementing digital tools for sustainability.
 - Begin collecting data on the impact of these technologies.
 - **Output:** Share initial case study findings in industry reports or white papers, targeting tourism organizations and policymakers.

Year 2: Data Collection and Preliminary Analysis (Torino + Pamplona)

1. **Months 13-18: Full-Scale Survey and Data Collection**
 - Deploy the online survey to a larger sample of tourists and collect data on their perceptions and behaviors.
 - Conduct interviews with stakeholders (e.g., tourism operators, cultural heritage managers) to supplement quantitative data.
 - **Output:** Present interim results at an international conference, such as the International Conference on Sustainable Tourism.
2. **Months 19-21: In-Depth Case Study Analysis**
 - Complete data collection for case studies and analyse the effectiveness of digital technologies in promoting sustainability.
 - **Output:** Submit a journal article to a top-tier tourism or sustainability journal, focusing on the real-world impact of digital tools in sustainable tourism.
3. **Months 22-24: Framework Refinement and Model Testing**
 - Refine the research framework based on the data analysis and begin testing models that link digitalization, management practices, and sustainable outcomes.
 - **Output:** Publish a conceptual framework paper in a high-impact journal and share a preprint on an academic repository (e.g., SSRN or arXiv) for early dissemination.

Year 3: Final Analysis, Publications, and Dissemination (Torino + Pamplona)

1. **Months 25-30: Synthesis of Findings and Final Framework Development**
 - Integrate findings from sentiment analysis, surveys, and case studies to finalise the research framework.
 - Conduct a comprehensive analysis to provide actionable recommendations for promoting sustainable cultural tourism.

6/9

- **Output:** Submit a comprehensive research paper that synthesises the study's findings to a leading journal in tourism management or digital transformation.
- 2. **Months 31-33: Stakeholder Workshops and Industry Engagement**
 - Organise workshops with tourism industry professionals, cultural heritage managers, and policymakers to disseminate findings and recommendations.
 - Develop practical guidelines and toolkits based on the research to help industry stakeholders implement sustainable practices.
 - **Output:** Publish industry-focused reports and toolkits, and distribute them through tourism associations, online platforms, and networks.
- 3. **Months 34-36: Final Dissemination and Future Research Directions**
 - Present final research findings at major international conferences (e.g., the World Tourism Organization's annual conference).
 - Identify future research directions based on gaps identified during the study.
 - **Output:** Publish a final summary paper or book chapter outlining the research's contributions to sustainable cultural tourism and its implications for future studies.

Ongoing Dissemination Activities Throughout the 3 Years

- **Academic Publications:** Aim to publish at least 3 peer-reviewed journal articles over the course of the research, targeting both tourism and digital innovation journals.
- **Conference Presentations:** Present findings at both national and international conferences at least once a year.
- **Workshops and Webinars:** Host annual workshops and webinars to engage with industry stakeholders, ensuring that the research has a practical impact.
- **Social Media and Digital Platforms:** Regularly update research progress on social media platforms (e.g., Twitter, LinkedIn) and maintain a project blog or website to disseminate findings in a more accessible format.
- **Collaboration with Industry Partners:** Collaborate with tourism boards, cultural organizations, and technology providers to ensure the research findings are implemented in practice.

Evaluation and Feedback

- **Annual Review Meetings:** Conduct annual review meetings with the research team, external advisors, and stakeholders to assess progress, refine the research plan, and adjust dissemination strategies as needed.
- **Feedback Loops:** Collect feedback from academic peers, industry partners, and conference attendees to continuously improve the research and its practical applications.

This 3-year plan ensures that the research is not only academically rigorous but also widely disseminated and impactful in the real world, fostering sustainable cultural tourism practices across different sectors.

Estimated schedule

7/9



See previous point