Impact of Smart Tourism Process on Consumer Behaviour and Satisfaction. A Survey Analysis Regarding Transformation of Conventional Operational Processes into Smart Tourism Processes of Ireland Tourism Industry

Submitted by: SENANUR YAYLI

Student Number: 22161040

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Declaration

I, therefore, verify that this paper is my original work. I have referenced all information obtained from other sources to guarantee the accuracy and comprehensiveness of the paper. I further assert that I have not submitted any part of this paper to qualify for any academic or professional award in any university or college. This paper was done under the guidance of my supervisor and has not been the basis for the award of any other examination. Lastly, my gratitude goes to my colleagues and mentors for their unwavering support and feedback during the research.

Signed: Senanur YAYLI

Date: 05/05/2024
Student number: 22161040

Abstract

In this study, the impact of smart tourism processes on consumers' behavior and satisfaction is sought within the matrix of the Irish tourism industry. Using survey analysis, this research explores how traditional operational processes have evolved into smart tourism processes and how these evolutions impact consumers' perception and experiences. From the survey data on the Irish tourism sector, new knowledge is derived on the awareness, acceptance, and influence of smart technology on consumer behavior and satisfaction. It is found that smart tourism enhances consumer experiences, re-engineers operational processes, and consequently influences tourists' overall satisfaction during their sojourns to Ireland. The study contributes to scholarly knowledge by demonstrating how smart processes influence consumer behavior and satisfaction and offers practical implications for gaining an advantage in the digital-tribal tourism contemporary environment.

Contents

Chapter1: Introduction

Tourism is defined as any activity wherein voluntarily people move from one surrounding to another. People on such voluntary visits are known as tourists who prefer to engage in different activities in the destination environment (Camilleri and Camilleri, 2018). According to de Sousa Bispo (2016), people are living in an era of displacement where there are several causes for visiting another place including study, religious purposes, recreation, sports, health, or leisure purposes during holidays. Holloway and Humphreys (2022) agree that tourism is a short-term temporary movement wherein people prefer going to destinations that are different from their everyday living and working surroundings. For Dwyer, Forsyth and Dwyer (2020) tourism is a set of specific activities that are adopted outside of the home or usual environment both at domestic and international level. The decision to visit a destination is dependent on multiple factors including personal needs, facilities and attractions of the destination. Fletcher et al. (2017) enlist transportation services, quality accommodation, and reliable services as some of the facilities that are sought in leisure destinations. Furthermore, the cost of a visit also plays a pivotal role in deciding a holiday destination. The positive inter-relationship between ancillary services, accommodation, transportation and sales plays a pivotal role in a positive tourist experience.

Smart tourism is characterised by the application of innovative technologies for the management and promotion of tourism of any scale. The primary goals of such a concept are to provide a more enjoyable experience for tourists, to rationalise resource utilisation, and to sharpen the ability of tourist destinations to compete and stay relevant. Kachwala and Pai characterise Smart Tourism as utilising augmented reality (AR), virtual reality (VR), mobile apps, and the Internet of Things (IoT) that "offer tourists rich and more engaging/personalised experiences." As an example, through smart tourism, AR can display historical information on a popular site when a smartphone is pointed at it, thereby enriching a tourist’s understanding and experience. Panyadee et al. note that thanks to technological innovations, resource planning is more structured and effective, reflecting "planful utilisation of the vast amount of data on the behavior and preference patterns among tourists through the technologies of big data and artificial intelligence." As a result, traffic management among popular sites may require less policing. Kusumaningsih and Angkoso claim that the concept of smart tourism is directed at promoting the idea of

sustainability through responsible resource utilisation and impact maintenance. For example, smart technologies in energy management systems in popular hotels and sites reduce energy use and ecological footprint. Raj, Gupta, and Ujjawal further suggest that due to digital technologies that attract more tourists, more jobs are created, ranging from information technology to customer service. Ma and Wang add that data analysis will improve crisis management during emergencies by aiding 2-way communication, ensuring that the response organisation's work is in sync, and advancing coordinated decisions. Additionally, data analytics enable managers to predict and make rational decisions amidst changing realities.

Global Tourism Statistics (2024) reveal that global travel and tourism business will increase by 18% in 2024. Basargani and Kilic (2021) report that the tourism sector is one of the key sectors of the world by dint of immense job creation, revenue generation, and economic prosperity. Approximately 319 million people were employed in the tourism sector directly or indirectly before the pandemic. After the resumption of tourism activities in the post-pandemic environment the direct contribution of the tourism sector to gross domestic product (GDP) has reached 7.7 trillion US. dollars in 2022 (Statista (a), 2023). According to another report by Statista (b) (2023), there is a gradual increase in the tourism sector after the pandemic to 2023 (Figure 1). Therefore, it is significant to devise strategies and tactics that can attract more visitors to tourist destinations, contributing to the GDP and economic growth of countries.

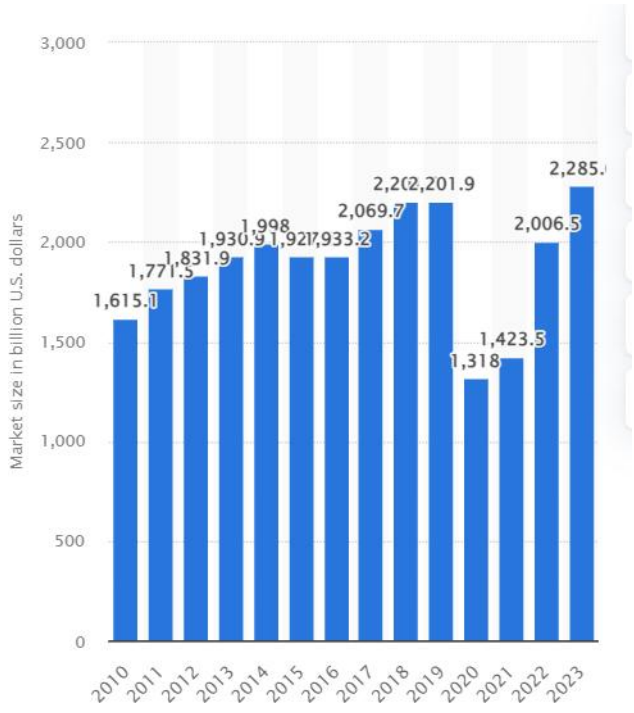


Figure 1 Market sise of the tourism sector worldwide (Statista, 2023)

The technological revolution has altered the tourism sector with digitalisation of the sector. Lee, Hunter and Chung (2020) elucidate that smart tourism is information and communication technology-based hospitality services, products, spaces, and experiences which benefit service users with effective service provision. In 2022, the online tourism books reached 474.8 billion US dollars which is expected to cross one trillion US dollars in 2030 (Statista, 2023). Travelling companies are making use of smart technologies contrary to traditional means of information and communication to enhance the efficiency of services (Benckendorff, Xiang and Sheldon, 2019). Nafrees and Shibly (2021) agree that tourism innovation is promoted by information and communication technologies contributing to the consumer experience. The best operations and facilities can be provided with smart tourism.

Tourism in Ireland is one of the most important sectors of the economy. There are vast numbers of tourist destinations in Ireland including nature reserves, historic trails, heritage centres, and interpretative centres that have been increasing the number of travellers toward Ireland. According to Pollard (2020), Ireland has a well-developed transportation infrastructure including roads, railways and airports. Furthermore, Trinity College, the Ring of Kerry, the Giant's Causeway, Dublin Temple Bar district and the Cliffs of Moher are tourist' sites of attraction.

According to World Data (2020) despite best tourist destination Ireland is ranked 55th in the world for tourism. The sector contributed approximately 5.21 billion US dollars to the economic growth of the country which is only 0.98 per cent of GDP. The Organisation for Economic Corporation and Development (2022) reports that tourism in Ireland is providing jobs to nearly 284,838 people directly which is 12.3% of national employment. There is a constant need to provide strategic direction to support the growth of competitive tourism. There are efforts from Failte Ireland and Tourism Ireland to offer competitive and high-quality tourism facilities to visitors to increase tourism revenue in Ireland. The tourism bodies of Ireland (Appendix 1) are working to promote sustainable and smart tourism to improve sectors' recovery.

Considering the role of the tourism sector in the economic growth and development of countries, researchers have turned their attention to initiatives or policies that can attract a larger number of tourists. There is a need to conduct a study that would provide empirical evidence about the role of smart tourism which aligns with consumer needs and turn them into loyal visitors. However, there is a dearth of research about the role of smart tourism in attracting more visitors to destinations. In addition, there is a need to conduct a primary study in the setting of Ireland, considering the significance of the sector in the economic growth of the country.

1.1 Research Rationale

It is essential to investigate the adoption of smart tourism in the context of Ireland to comprehend its readiness to enhance competitiveness in the global tourism market. Tourism industry can move forward with the integration of new technology in accordance with altering traveler trends and needs. The increase in consumer satisfaction leads to loyal consumer network which is essential for growth of tourism sector. The evaluation of the influence of smart tourism processes over consumer behaviour and satisfaction in Ireland will direct the policy makers to formulation of initiatives that will benefit stakeholders of tourism sector. Smart tourism processes like augmented reality, mobile applications, data analytics, and location-based services need to be investigated to improve various aspects of visitors ranging from trip planning to navigation, information access, and interaction with local culture. Investigating the change in traditional tourism processes into smart tourism is essential to assess its effectiveness in positive consumer experience and satisfaction in the setting of Irish tourism sector which has great potential for improvement. The research has both academic and policy implications as an effort to improve sustainability and competitiveness of Irish tourism. The fall in tourism revenue can be revived

while providing smart solution to problems faced by visitors in traditional tourism. There has been research about the impact of smart tourism on the consumer behaviour of other regions, but there is need to investigate its role in providing positive consumer experience in the setting of Ireland. Therefore, the purpose of this study is to address these issues and develop substantial foundation for an efficient, sustainable and advanced tourism sector in Ireland. The profound study of visitor's perception and experiences can overcome negative aspects of conventional tourism.

1.2 Research Aim and Objectives

The present study aims to investigate the impact of transforming traditional operational processes in the Irish tourism sector and destinations into smart tourism processes on consumer behaviour and level of satisfaction. For the achievement of this aim the research objectives will be:

- To study the implementation and incorporation of advanced technology and applications in the Irish tourist industry with statistical analysis of data collected through a survey from a sample population.
- To assess the influence of smart tourism and destination procedures on consumer experiences, behaviours, and overall satisfaction by collecting first-hand information with a close-ended questionnaire.
- To explore consumers' concerns and attitudes regarding data privacy and security when using these intelligent tourism technologies by incorporating this aspect-related questions in the survey form.
- To examine the huge influence of intelligent technologies on destination loyalty or word-of-mouth recommendations by using descriptive statistics measures.

1.3 Structure of Dissertation

The present dissertation consists of five chapters wherein the first chapter is introducing the target audience with key variables of the study including tourism, smart tourism, significant tourism statistics, and the tourism sector in Ireland. The study aims and objectives are also defined in this chapter to determine the direction of the dissertation. The second chapter of the dissertation is a literature review which provides an overview of the existing literature about the research topic. The data about the research topic is arranged according to similar themes identified in a pool of knowledge. The third chapter comprehensively discusses the methodology adopted for the present study. This chapter enhances the credibility and reliability of research

findings as other researchers can obtain approximately similar results by repeating the process given in the methodology chapter. The fourth chapter presents results that are obtained after data analysis. The fifth chapter provides a discussion in terms of how far the findings of the present study agree or disagree with existing literature. Furthermore, what are academic additions made by the present study about smart tourism and its impact on consumer behaviour and satisfaction? The wider implications for various stakeholders are also discussed in this chapter. The fifth and last chapter of the dissertation summarises key points of the dissertation and provides recommendations in light of the research findings.

Chapter 2: Literature Review

2.1 Introduction

"Literature Review" is a review of available literature, research studies, books, and articles that comprehensively contribute to research questions. A literature review, as defined by Randolph (2019), is an analysis and summary of available knowledge and findings to give a broad overview of the already existing understanding or state of knowledge in a given field of study or subject. Ferrari (2015) emphasises that a literature review places the researcher within the scholarship currently available on the subject. By reviewing relevant literature, researchers can indicate existing gaps, controversies, and debates in that field of study and place their research within such a larger conversation. A literature review helps the researcher know some areas where more research needs to be conducted. Snyder (2019) makes it clear that researchers can justify their study within the identified field and provide new knowledge by noting what has been studied and what questions need to be answered or further elaborated. A literature review may inform research design, methodology, or data collection techniques. For example, how a previous study discussed a related research question or topic may help inform the choices a researcher makes for their study design and methods. From the literature review, a theoretical framework or conceptual model that guides the research is often developed. It is further understood that many researchers develop the conceptual approach in synthesising various available theories with empirical findings to further their understanding of the theoretical underpinning of the topic.

2.2 Adoption and Integration of Advanced Technology in Tourism Sector

Technology use in the tourism sector has revolutionised changes in the industry, raising the customer experience level, smoothening operation processes, and opening up opportunities for business in ways that have never been experienced before. Companies adopt information and communication technology at different speeds due to diverse causes (Dhaigude, Kapoor, and Ambekar, 2016). The researchers highlight the fact that it was only after people realised the benefits that come along with technology that they adopted it to streamline the process of tourism with low time investment and low financial investment. The example of Uber is quoted which was launched only a decade ago. Buhalis et al. (2024) employed a critical review method to elaborate that advanced data analytics and artificial intelligence (AI) enable businesses to

analyse customer preferences and behaviours to offer personalised recommendations and tailored experiences. This can include personalised travel itineraries, accommodation suggestions, and activity recommendations based on individual interests and past behaviours. Soares, Mendes-Filho, and Gretsel (2021) elucidate in a qualitative study by conducting semi-structured interviews with hotel managers that isomorphism on a larger scale has caused the tourism sector to integrate digital technology. The normative, coercive, and mimetic factors have been major determinants of technology adoption. Institutional pressure forced several managers to integrate technological processes into tourism activities. The awards and certification for best-performing tourist companies also encouraged companies to adopt smart tourism processes. Hence, previous studies have discussed various factors contributing to the adoption of smart tourism. However, there is a need to conduct an updated study in the context of Ireland to evaluate the use of digital technologies in tourism processes and how far smart tourism has affected consumer behaviour and satisfaction.

The study by Min, So and Jeong (2021) examines Uber mobile applications as technological innovation and finds that social influence, relative advantage, and compatibility motivate consumers to use mobile applications in tourism sector. Furthermore, when consumers experiences ease of use and usefulness according to expectations, it works as positive conditioning and strengthens the behaviour of using smart technologies in tourism. Hence, adoption intention is directly correlated to perceived ease of use and usefulness. The findings of Gupta, Dogra, and George (2018) are similar to Min, So and Jeong (2021) as both emphasise the role of social influence in adopting smart tourism. Furthermore, smart tourism is price saving with less risk and better performance which has expanded its usage across the world.

The concept of smart destinations involves leveraging IoT (Internet of Things) technology to create connected and intelligent tourism destinations. This can include smart transportation systems, interactive signage, and sensor-based infrastructure that enhances the overall visitor experience while improving efficiency and sustainability. According to Pillai and Sivathanu (2020) in the Indian setting, chatbots have been adopted in the tourism and hospitality sector when consumers were comfortable with their usage. Kaushik, Agarwal, and Rahman (2015) are of the view that technology integration enhances the independence of consumers, therefore, they prefer self-service technologies compared to conventional methods of tourism. However, when

the trust of the consumers increases then new norms are adopted. Ghaderi, Hatamifar and Ghahramani (2019) discuss that virtual reality and augmented reality technologies allow tourists to experience destinations virtually before they even arrive. This not only helps travellers make more informed decisions but also enhances their anticipation and excitement. VR and AR can also be used in destination marketing campaigns to showcase attractions and experiences in an immersive way.

2.3 Impact of Smart Tourism Processes on Visitor Experience and Satisfaction

Smart tourism technologies can analyse visitor preferences, behaviours, and past interactions to provide personalised recommendations for attractions, activities, and dining options. This tailored approach enhances the visitor experience by offering suggestions that align with individual interests. According to Law and Wang (2018), mobile technology facilitates travellers during trips. The first-hand information collected from both the suppliers and consumers confirmed that smart tourism applications often include features such as interactive maps, real-time navigation, and itinerary planning tools. These functionalities streamline the planning process and help visitors navigate destinations more efficiently, reducing stress and enhancing satisfaction. Smart tourism initiatives often incorporate accessibility features such as digital guides in multiple languages, audio descriptions, and wheelchair-friendly routes. By catering to diverse needs, these technologies ensure that all visitors can fully engage with and enjoy the destination. Wang et al. (2014) also agreed that from pre-trip planning to pro-trip feedback mobile technologies have revolutionised travel behaviours and patterns. When travellers have all the necessary information before the tip, there is less waste of time and resources.

According to Yung and Khoo-Lattimore (2019), AR and VR technologies offer immersive experiences that enhance visitors' understanding and enjoyment of attractions. Whether through virtual tours of historical sites or augmented reality guides in museums, these technologies create memorable experiences that leave a lasting impression (Loureiro, Guerreiro, and Ali, 2020). Jung and Dieck (2018) agree that smart tourism platforms provide visitors with real-time information about events, weather updates, transportation schedules, and crowd levels. This enables visitors to make informed decisions and adapt their plans, accordingly, leading to a smoother and more satisfying travel experience. Ghaderi, Hatamifar, and Ghahramani (2019) discuss that the use of tablets and smartphones in the search process saves tourists from unexpected circumstances.

Furthermore, the tourists can experience the destination in a more innovative way. There is less effort and time required to reach the required destination with the use of smart technologies (Magano and Cunha, 2019; Adeola and Evans, 2019). The researchers have identified diverse benefits of technological integration in the tourism sector by discussing different technological devices such as mobile technology, virtual reality, augmented reality and tablets. Several benefits of smart tourism contribute to overall consumer satisfaction and trust building. However, there is a need to collect quantitative data to investigate the correlation between smart tourism and consumer behaviour, experience, and overall satisfaction. The quantitative data will be useful in assessing the frequency and intensity of positive impact on consumer behaviour.

According to Pencarelli (2020), the use of a mobile phone during travelling gives a sense of security to travellers as they feel more informed and equipped to address any uncertain challenges. During the travel smart technologies allow tourists to stay in touch with their work responsibilities as well. Adelola and Evans (2019) added that by dint of internet the travellers can share travelling memories during and after the trip. Storing and retrieving memories is more convenient with mobile technologies. When tourists can connect their mobiles with the hotel's network, it reduces perceived risk. Innovative travellers are more prone to use smart tourism compared to conventional tourists. Travelers want to stay connected, and it is possible only with smart technologies. However, it is observed that previous studies have largely focused on consumers rather than suppliers in terms of experiences and perceptions. There is a need to conduct a quantitative study that is largely focused on the viewpoint of suppliers in the Irish tourism sector.

Smart tourism platforms enable visitors to provide feedback and reviews in real time, allowing destinations to identify areas for improvement and address visitor concerns promptly. By actively soliciting and responding to feedback, destinations can enhance visitor satisfaction and loyalty. Sigala (2018) elucidates that technologies have transformative potential. The paper by Sigala adopts a futuristic approach wherein the researcher discusses that tourism resources and actors are going to transform and disrupt in future as a result of the technological revolution. Pencarelli (2020) rightly calls the tourism sector tourism 4.0 which has enhanced smartness, sustainability, and quality of tourism activities. The qualitative study of Ukpabi and Karjaluoto (2017) agrees that innovative information and communication technology has turned tourism

into e-tourism. Although the study has explored the acceptance and adoption of technology with multiple models and frameworks, the data is quantitative and context limited. The research findings cannot be applied to other settings or countries. In addition, the quantitative data from 2015 to 2016 is incorporated which has become outdated as several years have passed. The study by Osei et al. (2020) alludes to a similar thesis that the fourth industrial revolution has changed the tourism sector entirely.

2.4 Challenge of Tourists' Data Privacy and Security Concerns in Smart Tourism Technologies

According to Ardito et al. (2019) the big data problem is present in the smart tourism as well. The study discusses challenges faced by smart tourism in terms of big data. Data volume, data variety, and data velocity are complex and require advanced analytical strategies. In addition, there is increased likelihood of biases, inaccuracies, and fraudulent activities which may harm the trustworthiness, reliability and accuracy of data. Jeong and Shiri (2020) agree that protection of personal and private information is a big issue in smart tourism. When a tourism destination cannot accommodate privacy and security of tourist's needs, it demotivates the visitor to reiterate the trip. Smart tourism technologies should have the capacity to protect personal information to enhance travelling experience. The challenges of privacy and confidentiality are examined in smart tourism in USA. However, it is equally significant to investigate what are the probable challenges faced by Irish smart tourism from the perspective of suppliers. Aliyah et al. (2023) is also of the view that artificial intelligence and internet of things have its own set of challenges despite several benefits. There are needs to take privacy measures to overcome challenges related to use of smart technologies.

Tourists' data privacy and security concerns pose significant challenges in the implementation of smart tourism technologies. Smart tourism technologies often rely on collecting large amounts of data from tourists, including personal information such as location data, browsing history, and preferences (Masseno and Santos, 2018). However, tourists may be wary of sharing their data due to concerns about how it will be used, who will have access to it, and the potential for misuse or unauthorised access. In fact, Masseno and Santos (2018) coincide with the assertion, adding that in smart systems, storage, transmission, and processing of the tourist's data are potential vulnerability instances that can be easily harnessed by exploitative villains. From the

human perspective, data breaches may cause tourists to suffer from the unauthorised access, theft, or even manipulation of their personal data and further financial loss, identity theft, and potential reputation damage for themselves and the organisation implicated (Florido-Benites, 2024). For their part, tourists might feel uncomfortable if smart tourism technologies collect, use, and share their data in ways that will not be transparent for them. However, the higher transparency in data collection that the data collection practices and privacy policies, and terms of services provide, in case they are absent, might result in tourists not telling the truth in sharing information—or possibly it may be withheld—thus undermining the smart tourism initiatives. Aryee (2020) goes further to affirm that the regulation landscape of data protection and privacy should have provisions, such as from regulations like the GDPR, CCPA, among others, and other local privacy laws. Thus, it requires these regulations to ensure the implementation of strict security measures for data protection, obtaining consent from tourists for the collection and processing of their data, and clear information about rights pertaining to personal data. Even when data collected from tourists are linked and used for legitimate purposes, individual identity from linked data could be re-identified. It will be a daunting task to realise effective techniques of anonymisation and de-identification that may keep the data privacy of the tourists intact while deriving meaningful analysis and insights for the organisation dealing in tourism. This agrees with Sampaio et al. (2023), who argue that such a proactive approach should ensure the privacy and safety of tourists during the design, implementation, and operation phases of smart tourism technologies at all times. This involves the use of privacy by design principle, robust cyber and information security measures, clear and transparent communication on data practices, and empowerment of tourists by controlling his personal information. Ultimately, fostering trust and confidence among tourists is essential for the successful adoption and sustainability of smart tourism initiatives.

2.5 Role of Smart Technologies on Destination Loyalty and Word-of-Mouth

Asis et al. (2020) is of the view that when consumers have positive experiences, there is an increased likelihood to visit that place again which is known as destination loyalty. Destination loyalty is not only beneficial for the tourism companies but overall stability of the sector and economic growth of the relevant setting. The quantitative findings of Asis et al. (2020) reveal that smart tourism plays a crucial role in tourist satisfaction and destination loyalty. Nieves-

Pavon, Lopes-Mosquera, and Jimenes-Naranjo (2024) elucidates with extended TPB model that with smart tourism, the companies are able to comprehend visitor behavioural pattern and intention in effective way. The identification of motivational factors in terms of positive word-of-mouth can be incorporated in tourism practices withs the use of digital technologies. The quantitative study found a positive correlation between word-of-mouth and loyalty. However, the study is limited to the data taken from Caceres and cannot be generalised to other regions. Torabi et al. (2023) agree that in Iran the use of smart tourism technologies have contributed to destination loyalty and word-of-mouth activities. The digital technologies facilitate updated information, enhanced interactivity, and better accessibility that are cornerstones to positive tourist experience. However, there is equal need of skill and expertise in the tourists to appropriately use the features present in smart technologies. Similar to the study of Nieves-Pavon, Lopes-Mosquera, and Jimenes-Naranjo (2024), the research by Torabi et al. (2023) is limited to a single developing country. The negative effects of smart tourism technologies are also missing from the study.

According to K.S.P. et al. (2023) personalisation, satisfaction, and loyalty are interrelated. The quantitative study conducted on Macau population confirms that accessibility and personalisation are more significant to enhance destination loyalty compared to informativeness. Kim, Lee and Han (2020) have identified moderating role of innovativeness and optimism. Smart hotels perform better than conventional business models in hospitality and tourism sectors. Ease of use, convenience, and enhanced control are of profound significance in determining positive customer perception about a destination. The sample population was taken from the USA and the perceptions of customers who had experienced smart tourism were included. However, there is likelihood that sample taken from some other country would bring forth different results. Shang, Sotiriadis, and Shen (2022) have identified the relationship between positive tourist experience and satisfaction. Smart technologies are useful in enhancing tourists' experience in terms of post-consumption behavioural intentions. Like Torabi et al. (2023), the study by Shang, Sotiriadis, and Shen (2022) word-of-mouth recommendations and revisit intentions are related interactivity, accessibility and personalisation. According to Aliyah et al. (2023) smart technologies have revolutionised the tourism sector by employing artificial intelligence and internet of things. Ivanov and Webster (2017) agree that service quality has improved considerably in hospitality and tourism sector by dint of smart technologies. Chatbots and robots are used for

communication. Generally, the staff members have limitation of speaking native language which hampers effective communication with visitors. However, smart technologies have resolved this problem. Social media posts work as positive word-of-mouth. Bodkhe et al. (2019) agree that e-tourism allows heterogenous digital payment methods. When visitors have a positive experience at a destination, there is destination loyalty in which motivates the travelers to visit the place again or recommend it to friend circle.

Previous studies have identified the role of smart technologies in destination loyalty and word-of-mouth but most of the studies are conducted on specific region and there is a need to conduct an updated study in the context of Ireland to identify whether similar attitude is present in Ireland or not. Furthermore, the author of present study did not find any research article using quantitative data from Ireland to study the role of smart technologies on destination loyalty.

2.6 Theoretical Framework: Technology Acceptance Model

The Technology Acceptance Model (TAM) was first presented to the public by Fred Davis in 1986 during his presentation of the Technology Acceptance Model at the MIT (Massachusetts Institute of Technology) Sloan School of Management, where he was pursuing his Ph.D. This model was basically developed to understand and predict organisational settings concerning the acceptance and adoption of new information technologies (Marangunic and Granic, 2015). From that background, TAM has been applied as a much expanded and adapted model in different forms among the more used ones in technology adoption and usage study and has been extended by researchers in various fields. The technology acceptance model (TAM), therefore, builds its basic underlying thesis on the simple fact that user acceptance and use of any new technology should derive from his perception of its usefulness and ease of use. In other words, TAM presupposes that users perceive a technology to be useful and easy; however, if the perception is different, then in that case, the users would reject the technology. Perceived usefulness: the level of belief the user has concerning the impact of a particular technology on enhancing job performance or making tasks easier to accomplish (Davis et al., 2023).

Perceived usefulness reflects the subjective assessment of the user regarding the benefit or advantage to be gained from the use of technology. The aspect of the model, "perceived ease of use," connotes the fact that when an individual believes that using technology will involve no effort or complexity, there is a greater likelihood of them adopting a particular technology. The

degree to which an individual believes in ease of use is a reflecting measure of how a user perceives subjectively the technology, ease of learning, and ease of operation (Rondan-Cataluna, Arenas-Gait. As such, it identifies that the two significant factors—perceived usefulness and perceived ease of use—directly affect the attitude of technology by the users. This, therefore, influences the intention of use. On its part, the purpose of technology use remains the critical determinant of the actual behaviour usage of the technology. For the present study, the Technology Acceptance Model (TAM) was chosen. It has been showing a solid level of prediction regarding users' acceptance and adoption of a wide range of technologies in diversified contexts. Indeed, TAM was one of such models that researchers have explored, and it proved reliable. Second, it provides an easy and straightforward framework concerning the analysis of the users' perceptions and attitudes towards the discussed technology (Ajibade, 2018). Its two core constructs—perceived usefulness and perceived ease of use—are easy to conceptualise and measure, making TAM accessible to researchers, practitioners, and policymakers. TAM is a derivation from empirical psychological theories, specifically the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) (Marikyan and Papagiannidis, 2023). The theory's base gives a firm footing to understand the cognitive processes, which serve as the basis for technology acceptance and usage behaviour. The flexibility of TAM covers more than one category of technologies and extends to more than one type of user population. Though developed specifically in the context of organisational information systems, TAM has been widely applied to consumer technologies, healthcare technologies, educational technologies, and many other technologies, referring to domain generalisability. However, despite having several positive points, TAM has faced criticism for its simplicity pays primary focus on perceived usefulness and perceived ease of use.

There is a probability that a huge number of factors determine the adoption of modern technology, among which could be included social influence, personal attitudes, and external circumstances, or those task requirements specific to the issue of modern technology adoption and not fully accounted for in TAM (Marikyan and Papagiannidis, 2023). TAM has been criticised for not considering contextual and social variables. Subsequent adaptations of it, such as TAM2 and TAM3, added further elements, such as social norms and social influence. Still, the original model is criticised because it is, in fact, primarily insufficient to explain differences in acceptance of technology within respective cultural and organisational contexts (Ajibade,

2018). Criticising this aside, TAM remains one of the most essential tools in the foundation of technology adoption research. Given its simplicity, much ease is provided to the researcher using it, and good generalisability, thus acquiring a "must start here" standing among many areas of study.

2.7 Research Gap

There is a lack of comprehensive research on the implementation and incorporation of advanced technology and applications in the Irish tourist industry. Existing studies lack statistical analysis of data collected through a survey from a sample population, leaving gaps in understanding the extent and impact of technology adoption in the industry. Limited research has been conducted to assess the influence of smart tourism and destination procedures on consumer experiences, behaviors, and overall satisfaction in the context of the Irish tourist industry. Existing literature has not utilised first-hand information collected through close-ended questionnaires from Irish sample population, leading to gaps in understanding the direct impact of smart tourism on consumer satisfaction. There is a need to conduct study that identify potential challenges with the use of smart technologies in hospitality and tourism sector.

2.8 Summary

Studies often highlight the rapid adoption of digital technologies in the tourism sector globally, with a focus on mobile technologies, social media, and IoT (Internet of Things). Literature suggests that the use of technology in the tourism industry aims to streamline operations and improve the efficiency of services, with some studies using statistical analyses to demonstrate positive trends in technology adoption rates among tourism providers. Numerous studies have examined how digital innovations in tourism affect consumer behavior and satisfaction. The findings generally indicate that technologies such as virtual tours, AR, and personalised mobile apps enhance the visitor experience by providing more interactive and customisable engagements. There is a consistent theme across studies concerning the apprehension tourists have regarding data privacy and security when using smart technologies. Research conducted through surveys incorporates questions about data handling, and the literature review would summarise findings that suggest a significant portion of consumers remain concerned about how their personal information is managed by tourism operators. The literature points to a strong

correlation between the use of intelligent technologies and an increase in destination loyalty and positive word-of-mouth recommendations.

Chapter 3: Research Methodology

3.1 Introduction

Scientific and empirical research authenticity and reliability find their basis in a linear and systematic path that scholars must take when they collect, study, and interpret data in assessing specific research questions. This path can be considered a map that illustrates the journey of scholars' adventure. In this essence, this chapter provides an explanation of the research methods used in this study to collect and analyse data. Such an explanation is critical to ensuring that scholars provide sufficient data on the techniques and processes used in any study to determine the reliability, authenticity, and credibility of the research findings. Kaliisa et al. (2022) argue that research methodology is a significant aspect of any empirical research as it defines the means, systems, and tools used by scholars when conducting research inquiries. Subheadings under a research methodology include research philosophy, research approach, data collection method, data analysis approach, and ethical considerations.

The importance of research methodology within academic studies and inquiries cannot be overstated. Shaheen et al. (2023) posit that it is the only means by which scientific inquiry can be defined to comply with the highest standards of validity, and reliability. Through the use of systematic methodologies, scholars can also minimise perceived biases and errors. It helps them to generate more accurate and reliable data. Research methodology is also crucial in ensuring that academic disciplines have a path to follow to maintain and enhance credibility and trust levels with society. Hence the concepts promote meaningful knowledge and innovation. Researchers who engage with various research methods are better equipped with skills to help enhance academic discourse and subject evaluation. Hence, research methodology is the concept that holds academic knowledge together for its consumption and application across disciplines.

3.2 Research Philosophy

Khatri (2020) defined research philosophy as the beliefs and assumptions which encourage how researchers see the world and hence support their way of conducting studies. It acts as a foundation towards research methods and methodologies. Various research philosophies with their principles and methodologies exist. While interpretivism tries to explain the phenomena through nature as experienced and interpreted by people, positivism tries to explore the truth through empirical evidence and clear scientific methods. Pragmatism tries to seek practical

solutions to present-day problems traced from the utilisation of findings. Realism, on the other hand, believes that there is an objective reality that exists beyond people, and it can be learned by empirical observations and theoretical reasoning through models. In this study, the appropriate research philosophy to use is positivism.

There are multiple reasons behind choosing positivism as the focus of this dissertation. Positivism is a research paradigm that emphasises a factual approach to conduct research. It is a systematic method that relies on tangible data or observable truth to test the hypothesis and theories. This meets the goal of the researcher's expectation which is to determine unbiased truth and establish a factual cause-effect relationship that occurs among variables. Positivism comes with many advantages for research. To start with, further studies can use the provided systematic procedures and measurements allowing studies carried out in different places with different researchers to have consistency. According to Shufutinsky (2020), further studies can lead to reducing biases and a more adapted opinion of research offers more reliability due to the increase of instruments used and sampled sise. Data is compared easily for future research.

3.3 Research Approach

A research approach is a comprehensive plan on how to study a research question or problem. It includes the direction of collecting and analysing the data, as well as the interpretation of the results. The research approach can be inductive, deductive, or abductive. Theoretical research may be argued using three modes of argumentation: deduction, induction, and abduction. Deduction is the process of thinking about data concerning which it may be matched to ensure that the claim is true. Induction is the opposite of deduction. It follows the argument and then tries to fit into that argument concerning data.

Inductive research begins with the data, and the researcher cannot go on without the data. The deductive approach begins with the argument and fetches the required data. Abduction infers the relationships between the concepts and believes that we cannot study science unless we have both scientific concepts and subjective observation. In the deductive approach, some pre-determined hypotheses or statements are tested with the collection and analysis of updated data. The deductive research approach is selected for the present study as it allows the testing of established ideas with the recently selected information. The deductive research approach is usually used in quantitative research techniques.

A deductive research approach is a top-down way of finding out the developed rule or hypothesis transferred from existing or current research. The rationale for selecting the deductive research approach for the current study is its potential for systematic theory testing, determining which model may refine the theory, which model may be taken broadly into practice, and the impact of the variable measurement and general characteristics. In the present study, the positivist research philosophy and quantitative data are selected, so the approach of research was deductive. The approach of deductive research most often is related to the method of quantitative research, but this approach can also be operated in a qualitative method to verify or allot a hypothesis framework through content analysis.

The dissertation aims to investigate the impact of the smart tourism process on consumer behaviour and satisfaction, with the survey analysis, therefore, the deductive research approach is most suitable for this type of research. The deductive approach is the critical criterion used in quantitative research, but it may also be practised in a qualitative method to verify a hypothesis framework through content analysis. This dissertation followed a structured and close-ended questionnaire to elucidate logic and theory's significance in dealing with the study and logical conclusion based on the premises agreed out in a theory or research framework.

3.4 Research Design

Research design refers to the "blueprint or plan that is used to guide the collection, analysis, and interpretation of data in a research study". There are three main types of research design: qualitative research, quantitative research, and mixed methods research. Qualitative research attempts to understand the meaning of human experiences and focuses on understanding a particular phenomenon within its natural setting. Unlike qualitative research design, quantitative research aims to establish cause-and-effect relationships between two or more variables and measure them in a quantifiable way. A research design is a crucial aspect that helps to ensure that the study is well-thought-out, valid, and reliable. In other words, the right research design enables researchers to conduct a study effectively, and efficiently, as well as minimising different biases and errors.

A quantitative research design was adopted for this dissertation. It is described as a structured and systematic analysis of numerical data to respond to a predetermined research question or examine a preformulated hypothesis. In many cases, a quantitative research design is done on

huge samples to ensure that the findings are statistically reliable and generalisable. For this research design, standardised measuring instruments such as tests or surveys are used to assist one collect data in a constant and unbiased way. The design is very particular in its planning and execution, specifically in establishing a targeted variable and an operational definition of how it is determined, which highlights the validity and reliability of the measure used. Generally, a quantitative research design begins with a possibility or hypothesis and then uses empirical data to endorse or refute the theory. During the analysis, statistical data analysis could be done with descriptive statistics, correlation analysis, regression analysis, and even inferential statistics performed on the data acquired. In so doing, professionals who use a quantitative design would present their study findings with tables, visuals, and/or statistical summaries to convey a short, succinct, and accurate outcome. Thereby, this design is well-known for its objectivity and predictive claims that permit it to be generalised in a broader population. Nevertheless, quantitative data may have certain restrictions such as sampling mistakes and measuring bias, which is why it is crucial to pay attention to how qualitative research might influence the field to expand its comprehension. On the whole, a quantitative research design is a systematic, scientific method for breaking down research questions and is extremely reliable for generalisability, which renders it the most appropriate selection for this research.

3.5 Data Collection Strategy

According to Wisker et al., the primary data collection method concerns information collection based on the source of evidence to address the research questions or objectives. The main advantage of primary information is the possibility for researchers to utilise their imagination and get fresh information that has not been obtained from available sources. The process of engaging in primary source data usually begins with the need for planning and designing which might include the selection of proper data collection methods and instruments. Among them are surveys, interviews, observations, experiments, as well as focus group discussions. Each of these methods has some advantages depending on the research question or the nature of the population. For example, surveys are beneficial since they make it possible to collect a large amount of data from a large portion of the participants within a short period. Interviews are also beneficial since they allow the participants to express their opinions freely. Observations are beneficial for obtaining rich qualitative data by allowing researchers to observe individuals'

or phenomena's behaviours in a natural setting. Experiments enable researchers to control variables to establish a causal link under controlled conditions. Focus groups provide a forum for group discussions to investigate attitudes, opinions, and perceptions more deeply. Despite the method, the researchers must ensure that their data collection tools and processes are reliable and valid.

The researcher has opted to collect primary data for this research based on several factors. Firstly, primary data presents more precise and accurate information since it originates from the source. Consequently, the validity of the study's findings can be guaranteed. As well, the researcher enjoys more control over the data collection process and can tailor data collection methods to their research objectives and questions. Thirdly, some information may not be accessed from secondary sources, especially when studying new or relatively new topics. Lastly, the primary data collection technique ensures the researcher interacts with respondents or sources, enabling the generation of data that is rich and contextually fitting to the phenomenon being studied.

On the other hand, the researcher has chosen not to employ a secondary data collection method for their study for several reasons. Firstly, secondary data may not always correspond to research objectives and may not be sufficiently specific to facilitate a certain issue of investigation which may limit the accuracy and the scope of the findings. Similarly, the quality of secondary sources can be different, and the researcher might have doubts about the reliability of the sources or their relevance to the given topic. Finally, basing research on secondary data only may limit the scholar during the in-depth examination of the subject matter or during answering certain research questions omitted in the existing sources of data. As a result, selecting a primary data collection approach would enable the researcher to contribute new knowledge to the sphere by introducing original data to the body of research. Therefore, the decision looks justified as it would allow the researcher to receive high-quality and relevant data which is essential to form strong and meaningful results.

3.6 Sampling Strategy and Sample Population

Sample strategy is a framework in which part of the individuals or elements is selected from a vast population for research or analysis purposes. It determines the way in which one may obtain information from a group that represents the whole population since it is not realistic to survey

the whole population. Rashid et al. (2021) assert that a sample population is a coherent group of individuals or elements from which it was selected. It is representative of the broader population of interest and should have some level of diversity to ensure that accurate and useful information is obtained. The characteristics of the sample population should match those of the broader population to ensure that the findings can be applied to explain the situation.

Probability sampling refers to the sampling technique where a researcher selects a sample from a population such that every individual within the population has an equal opportunity to be included in the sample. In this dissertation, the analysis was purposive sampling. The use of probability to determine a population to be included in the data collection was not applied. The judgment or purposive sampling strategy was the basis of choosing the population to participate in this dissertation. It is known as judgmental, selective, or subjective sampling. Purposive sampling is commonly applied in qualitative research and mixed methods research as it helps in identifying information-rich cases and is used when the researcher has limited resources. It also works with high risks of research as the research's bias is high.

3.6.1 The Inclusion-Exclusion Criteria

In purposive sampling, inclusion-exclusion criteria are preset to avoid personal bias. The inclusion-exclusion criteria for this dissertation are given below:

Inclusion Criteria	Exclusion Criteria
The research participants more than 18 years old will be included.	The responses from travellers less than 18 years old will not be included.
The individuals who have experience in smart tourism will be included.	The respondents who had never experienced smart tourism will not be included.
Respondents who have experienced smart tourism in Ireland will be included.	The individuals who have not experienced smart tourism in Ireland will be excluded.

This population was selected because of its relevance to the research topic, which focuses on consumer behaviour in urban settings. The use of probability sampling, in this case, is expected

to minimise sampling bias and increase the reliability and validity of the research findings. By implementing purposive sampling, the researcher ensures that the sample is representative of the population.

3.6.2 Research Instrument

A research instrument is any tool or method utilised to obtain or gather data from subjects throughout the research. These instruments are essential to the success of the research and can take a variety of forms depending on the discipline and type of study. Questionnaires and surveys are two examples of structured instruments used to take specific information from respondents. The questionnaire can be administered in person, by post, electronically, or over the phone. Though interview guides, observational checklists, and psychological tests are some of the strategies to collect primary data, however, to conduct the current topic-related information close-ended questionnaire was applied, refer to Appendix 2. For this dissertation, the close-ended questionnaire is chosen since it is the one in which respondents can answer all questions in a predetermined form. The responses can quickly be quantified and be used for statistical analysis because they are standardised. Furthermore, the questionnaire is common among the respondents because they take shorter times to respond due to the fact they only require choosing an answer, not mentioning all details in a filler. Also, the answer is fixed and does not influence serial questions. Closed-ended questions include multiple choice, true or false, and rating scales like Likert scales. It is widely employed in many contexts, resonating with the large volume of data required from large groups.

3.7 Data Collection Method

The method employed for this dissertation is the survey due to the fact it was conducted with closed-ended questions. The main advantage of this method is that the respondents are given a set of predetermined answers, and as a result, the acquired information can be quantified and compared. The survey instrument was distributed with the use of Google Forms. This method considerably facilitated the distribution and gathering of information given that the sample under analysis is spread throughout numerous countries. The information addressed in the survey questionnaire pertains to numerous facets of consumer behaviour. The type of data to be collected is uniform data that is easy to analyse with statistical techniques and measures.

The survey was conducted online to ensure that the surveying process is anonymous, and this reduces the risk of response bias and possible errors associated with this bias. Since the respondents feel that questions are asked anonymously, it is possible for them to provide information truthfully. Moreover, the online method grants the respondents the ability to complete the survey at their own time and convenience. As a result, more individuals participate in the survey and the response rate increases.

3.8 Data Analysis Technique

After the quantitative data has been collected various techniques including Excel, descriptive statistics, and inferential statistics can be employed to infer meaning. In this dissertation, the quantitative data has been analysed using SPSS. SPSS is a widespread program used to conduct in-depth statistical analysis. Descriptive statistics are to be used to summarise the characteristics of the sample population and the key variables. The summary measures include frequencies, means and standard deviation. The summary revealed the sample population's characteristics and the variables under investigation. Inferential statistical tests are to be used to make conclusions from a small group represented by the sample population and make generalisations about the entire sample population. This should answer the research questions.

3.9 Ethical Considerations

Shaw et al. (2020), contended that several ethical considerations need to be made during the dissertation to ensure the safety and well-being of participants. Permission from the ethics committee of the institute was taken. The confidentiality and anonymity of participants' data were ensured during and after the study. Additionally, the research adhered to relevant professional associations and institutional review board guidelines. Accordingly, this description implies that the study was ethical and adhered to the existing standards and regulations that aim to protect the rights, safety, and well-being of participants. Although potential conflicts of interest and biases were disclosed, they were not considered enough to affect the research findings and compromise objectivity. The collected data was stored and disposed of according to guidelines given in the General Data Protection Regulation. The collected data was not shared with any unauthorised individual or organisation. The data was not used to harm the integrity of anyone. After the study was completed the data was systematically wasted. In totality, the study was consistent with the ethical principles of respect for persons, beneficence, and justice. In turn,

this statement means that the rights and well-being of participants were upheld during the study, and the research was facilitated in an unbiased manner. Thus, by considering the above ethical standards, this study ensured the reliability, validity, and usefulness of the collected data to the research.

3.10 Summary of the Chapter

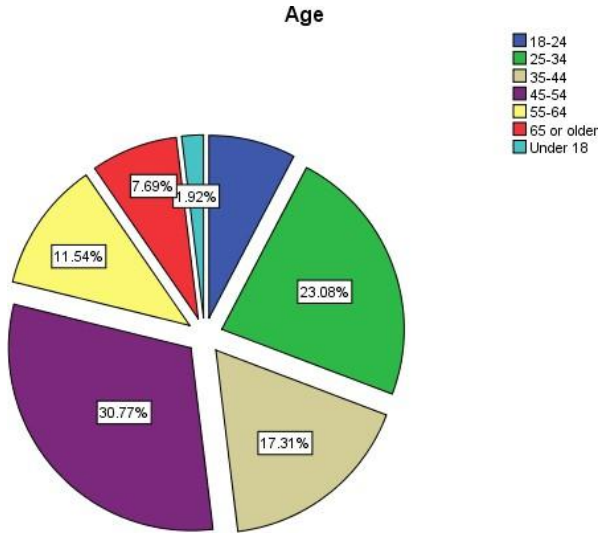
A dissertation chapter on methodology is a documented plan on how the study is to be conducted. It explains the sampling strategy and sample population, data collection methods, data analysis, and the ethical considerations to be observed. For the research to produce data that can be generalised and hence representative, the use of probability sampling using purposive sampling is employed. The choice of surveying with closed-ended questions was made for fast data collection from a wide-ranging and dispersed sample population. The data was analysed using a statistical software tool like SPSS to test the hypotheses. Throughout, the ethics of the research were given priority. Hence, this chapter offers a blueprint of how the research study was to be conducted to ensure rigour, transparency, and ethical compliance from the beginning to the end.

Chapter 4: Findings and Analysis

4.1 Introduction

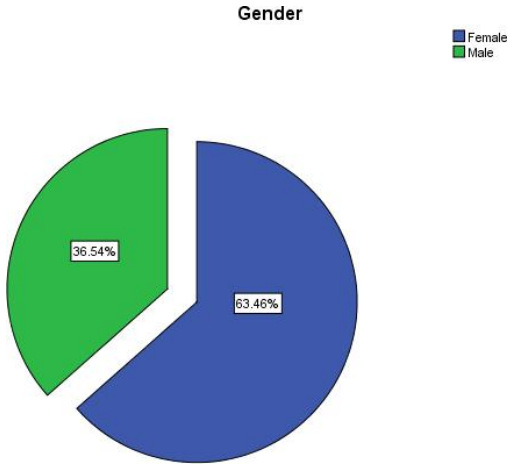
In Chapter 4, the results and analysis from the data collection are discussed. This gives us a better understanding of how smart tourism processes affect how tourists behave and how satisfied they are with Ireland's tourism industry. This part will explain some important patterns, trends, and connections seen in the data, which will show how well using new technologies can improve tourist experiences. This chapter looks at all the survey answers to meet the study objectives set out in Chapter 1. It does the issue by looking at how smart tourism efforts affect different parts of customer behaviour, such as their happiness, worries, and loyalty. This chapter uses statistical methods and looks at how different factors are related to each other to try to find useful information that helps to learn more about how smart technologies have changed the way people travel in Ireland today.

4.2 Graphical Analysis

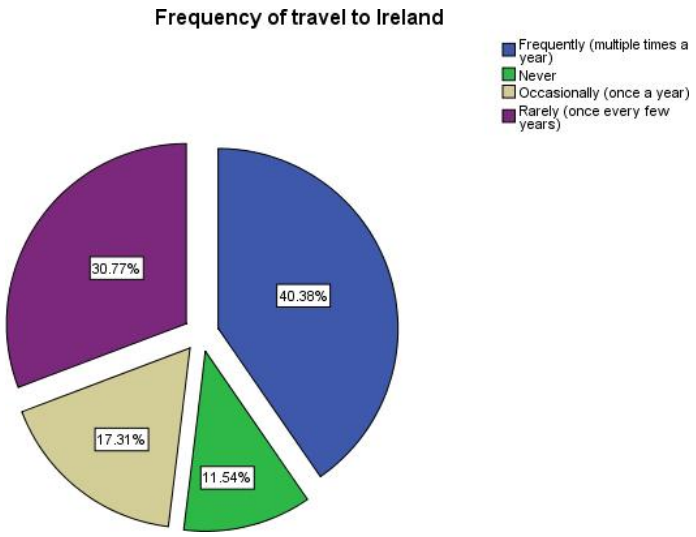


The age range of survey responses gives us interesting information about the people participating in the study. Thirty point eight percentage of the respondents (30.8% of the group) are between the ages of 45 and 54. Based on this, people in their mid-to late-40s seem to be the most common age group in the study. Next are people aged 25 to 34, who comprise 23.1% of the group, and those aged 35 to 44, who constitute 17.3%. This shows that there are a lot of people in the survey

group who are in their late 20s to early 40s. Also, people aged 55 to 64 and those aged 18 to 24 make up 11.5% of the sample each. People aged 65 or older and those under 18 make up 7.7% and 1.9%, respectively. In general, the age spread shows that the subjects are very different, with a lot of people in the middle-aged range.



The survey included a slightly higher percentage of female respondents (63.5% of the group) than male respondents (36.5%). This means that there are probably more women in the study group. The large number of women who answered may be a sign of a larger trend in tourist research women are more likely to take part in surveys and studies about travel and relaxation. However, it is important to note that there were also male volunteers, albeit in a smaller number. This shows that both men and women were represented equally in the studied group.



Looking at how often people travel to Ireland gives us information about how they travel and how interested they are in the location. Notably, a large number of respondents (40.4% of the sample) said they travelled to Ireland often and made multiple trips there each year. This says that a lot of the people who answered the survey want to visit Ireland as a vacation spot. Additionally, 30.8% of those who answered said they only travel to Ireland very rarely, which means they do go there more than once, probably every two or three years. Additionally, 17.3% of those who answered said they occasionally travel to Ireland, which means they visit once a year, while 11.5% said they have never been to Ireland. This spread shows the different types of travellers among the interviewees, from people who visit Ireland often to people who have never been there before. It gives us a full picture of how they feel about Irish tourism.

4.3 SPSS Analysis

Table 1: Descriptive statistics show the Implementation of Advanced Technology

Variables	Categories	Frequency	Percentage
The use of advanced technology (e.g., mobile apps, AI) enhances my overall tourist experience in Ireland.	Neither Agree nor Disagree	6	11.5
	Agree	33	63.5
	Strongly Agree	13	25.0

The implementation of smart tourism processes has improved the efficiency of booking accommodations and transportation in Ireland**.**	Strongly Disagree	1	1.9
	Disagree	2	3.8
	Neither Agree nor Disagree	5	9.6
	Agree	28	53.8
	Strongly Agree	16	30.8
The implementation of smart tourism processes has improved the efficiency of booking accommodations and transportation in Ireland.	Strongly Disagree	1	1.9
	Disagree	2	3.8
	Neither Agree nor Disagree	5	9.6
	Agree	28	53.8
	Strongly Agree	16	30.8
I feel that smart tourism technologies have enhanced the overall safety and security of my travel experiences in Ireland.	Strongly Disagree	2	3.8
	Disagree	1	1.9
	Neither Agree nor Disagree	11	21.2
	Agree	27	51.9
	Strongly Agree	11	21.2

Table 1 shows general data that show how modern technology is used in the Irish tourism industry. According to the variable "The use of advanced technology enhances my overall tourist experience in Ireland," most people (88.5%) either agreed or highly agreed with the statement. This shows that people had a good view of how technology affected their holidays. Of those who answered, 63.5% agreed and 25.0% strongly agreed. All of this shows that a lot of people agree that new technologies like mobile apps and AI can make the whole tourist experience in Ireland better. Most of the people who answered liked the idea of using smart tourist processes to make booking rooms and transportation more efficient. 84.6% of those who answered either agreed or highly agreed that smart tourist processes have made it easier to book transport and lodging. It is interesting that a lot of people (30.8%) strongly agreed with the statement, which shows that they are very happy with how smart tourism efforts have made things run more smoothly. Additionally, when asked how they thought smart tourist technologies improved safety and

security, a large majority of respondents (73.1%) either agreed or highly agreed with the statement. This shows that a lot of tourists think that smart tourism technologies make them feel safer and more secure while it is travelling in Ireland. Notably, 5.7% of those who answered either disagreed or strongly disagreed with this statement. This shows that some people are sceptical or dissatisfied with how smart tourist technologies have improved safety and security.

Table 2: Pearson correlation shows the relationship of Smart Tourism on Consumer Experiences and Satisfaction

	Smart tourism initiatives have positively influenced my decision-making process when planning a trip to Ireland.	Overall, I am satisfied with the tourist experiences facilitated by smart tourism processes in Ireland.	The use of smart tourism technologies has improved my interactions with local businesses and services in Ireland.	I am more likely to return to Ireland for future vacations due to the positive experiences enabled by smart tourism initiatives.
Smart tourism initiatives have positively influenced my decision-making process when planning a trip to Ireland.	1	.430**	.483**	.438**
		.001	.000	.001
Overall, I am satisfied with the tourist experiences facilitated by smart tourism processes in Ireland.		1	.571**	.477**
			.000	.000
The use of smart tourism technologies has improved my interactions with local businesses and services in Ireland.			1	.543**
				.000
I am more likely to return to Ireland for future vacations due to the positive experiences enabled by smart tourism initiatives.				1

In the Irish tourism context, Table 2 shows the Pearson correlation values that show the link between smart tourism efforts and different parts of customer experiences and happiness. All

pairs of factors have statistically significant positive associations, according to the findings. First, there is a fairly strong positive association ($r = 0.430$, $p < 0.01$) between how smart tourism efforts affect people's decisions about trips to Ireland and how happy they are with their trip generally. If visitors think that smart tourism efforts have helped them make decisions, they are more likely to be satisfied with their general vacation experiences in Ireland. Additionally, there is a stronger positive relationship ($r = 0.571$, $p < 0.01$) between general tourist happiness and the use of smart tourism tools to improve contacts with local businesses and services. In other words, tourists who are happy with their trips generally thanks to smart tourism processes are more likely to say that using technology to connect with local businesses and services made their trips better.

Furthermore, there is a moderately strong positive correlation between the decision to plan a trip ($r = 0.438$, $p < 0.01$) and interactions with local businesses and services ($r = 0.543$, $p < 0.01$) and the likelihood of returning to Ireland for future vacations because of positive experiences made possible by smart tourism initiatives. This shows that tourists who think that smart tourism efforts have a good effect on their decisions and relationships with local businesses are more likely to think about taking another holiday in Ireland. The results show that smart tourism initiatives are strongly linked to several positive and significant aspects of Irish consumers' experiences and happiness. This shows how important technology-based approaches are for improving tourists' experiences and making them loyal to their destination.

Table 3: Multiple regression shows the Influence of Smart Tourism on Consumer Experiences and Satisfaction

Variables	**Smart Tourism on Consumer**		
	Beta	**t**	***p***
(Constant)	1.150	1.868	.068
Overall, I am satisfied with the tourist experiences facilitated by smart tourism processes in Ireland.	.173	1.173	.246

The use of smart tourism technologies has improved my interactions with local businesses and services in Ireland.		.279	1.693	.097
I am more likely to return to Ireland for future vacations due to the positive experiences enabled by smart tourism initiatives.		.220	1.392	.170
R^2	29.7%			
F	6.769			.001

In Ireland's tourism business, Table 3 shows the outcomes of a multiple regression study that looked at how "smart tourism" affects customers' experiences and happiness. The study looks at three predictor variables: how satisfied tourists are with their trips made easier by smart tourism, how they use these technologies to have better interactions with local businesses and services, and how likely they are to go back to Ireland for vacations in the future because of good experiences made possible by smart tourism. There is a significant F-value ($F = 6.769$, $p < .001$) in the results that shows the total model is statistically significant. It explains 29.7% of the variation in buyer experiences and happiness.

The only predictor variable that has a statistically significant effect on customer experiences and satisfaction is the use of smart tourism technologies to improve interactions with local businesses and services (beta coefficient of.279) ($t = 1.693$, $p = .097$). This shows that tourists who think that smart tourism technologies have made it easier for them to connect with local businesses and services are more likely to be satisfied with their general trip to Ireland. According to the non-significant beta coefficients ($\beta = .173$, $t = 1.173$, $p = .246$; $^2 = .220$, $t = 1.392$, $p = .170$), overall satisfaction with tourist experiences made easier by smart tourism processes and the likelihood of returning to Ireland for future vacations because of positive experiences made possible by smart tourism initiatives do not have statistically significant effects on consumer experiences and satisfaction. Overall, these results show that using smart tourism technologies to improve interactions with local businesses and services is a big part of how tourists feel about the Irish

tourism industry. Other things, like how satisfied people are with smart tourism processes in general and how likely they are to visit again, may have less of an effect on how tourists feel.

Table 4: ANOVA Analysis shows Explore Consumers' Concerns and Attitudes Regarding Data Privacy and Security

		Sum of Squares	df	Mean Square	F	Sig.
I trust that the organisations implementing smart tourism technologies in Ireland prioritise the security of my personal information.	Between Groups	2.118	4	.529	.542	.706
	Within Groups	45.940	47	.977		
	Total	48.058	51			
I feel adequately informed about how my data is collected and used by smart tourism applications in Ireland.	Between Groups	4.641	4	1.160	.858	.496
	Within Groups	63.590	47	1.353		
	Total	68.231	51			
The level of transparency regarding data privacy policies influences my decision to use smart tourism technologies in Ireland.	Between Groups	1.844	4	.461	.445	.775
	Within Groups	48.675	47	1.036		
	Total	50.519	51			

Table 4 shows the outcomes of an ANOVA test that looked at how customers felt about data privacy and security issues when smart tourist technologies were used in Ireland. Three important factors are looked at: trust that organisations put the safety of personal information first; feeling well-informed about data collection and use; and how openness about data privacy policies affects the choice to use smart tourist technologies. The ANOVA results show that there is no significant difference between the groups for the measure "trust in organisations putting the security of personal information first." This means that Irish customers don't trust companies that are using smart tourism technologies very differently depending on the group they are in. Most of the variation is within groups, which suggests that differences between people within the same group may have a bigger effect on trust levels than differences between groups. Take an analysis

of the ANOVA results for the measure "feeling adequately informed about data collection and usage," there is no significant difference between the groups ($F(4, 47) = 0.858$, $p = 0.496$). This shows that customers in Ireland do not think very differently about whether they are well informed about how their personal information is gathered and used by smart tourist apps.

Finally, the ANOVA results show that there is no significant difference between the groups for the variable "the level of transparency regarding data privacy policies influences my decision to use smart tourism technologies" ($F(4, 47) = 0.445$, $p = 0.775$). It seems that the fact that different groups have different levels of openness about their data privacy rules doesn't have a big effect on people's choices to use smart tourist technologies in Ireland. Overall, the results that were not significant across all factors show that customers' worries and views about data privacy and security in the context of smart tourism technologies are not very different between different groups of people. Based on these findings, attempts to improve trust, information openness, and data privacy rules should be broad to meet the needs of all customers in the same way.

Table 5: Multiple regression shows the Influence of Intelligent Technologies on Destination Loyalty or Word-of-Mouth Recommendations

Variables	**Intelligent Technologies**		
	Beta	**t**	***p***
(Constant)	.625	1.318	.194
I am likely to recommend Ireland as a travel destination to friends and family due to the positive experiences enabled by smart tourism initiatives.	.562	3.831	.000
The availability of smart tourism services influences my decision to choose Ireland over other travel destinations.	.247	1.848	.071
Overall, I believe that smart tourism initiatives contribute to a more enjoyable and satisfying travel experience in Ireland.	.056	.441	.662
R^2	54.5%		

F	19.153	.000

In Ireland's tourist business, Table 5 shows the outcomes of a multiple regression study that looked at how smart technologies affect location loyalty or word-of-mouth suggestions. There are three predictor variables in the study: the belief that smart tourism initiatives make travelling in Ireland more enjoyable and satisfying, the availability of smart tourism services that make people choose Ireland over other travel destinations, and the likelihood of recommending Ireland as a travel destination because of positive experiences made possible by smart tourism initiatives. The results show that the model as a whole is statistically significant ($F = 19.153$, $p < .001$), and it explains 54.5% of the variation in tourists' loyalty to a location or suggestions from other people. When looking at the individual predictor variables, the strong positive beta coefficient of.562 ($t = 3.831$, $p < .001$) shows that the likelihood of recommending Ireland as a travel destination because of positive experiences made possible by smart tourism initiatives has a statistically significant effect on destination loyalty or word-of-mouth recommendations. Smart tourism efforts have made it possible for tourists to have good experiences in Ireland. These tourists are more likely to recommend the country and spread good word of mouth.

This is likely to be important because smart tourism services make people more likely to choose Ireland over other places to visit (beta value =.247; $t = 1.848$; $p = .071$). The positive coefficient for this variable doesn't reach normal statistical significance, but it does suggest that tourists who think that smart tourism services play a role in their choice of destination are more likely to be loyal to that destination or spread the word about it. Smart tourism initiatives in Ireland are thought to make travel more enjoyable and satisfying, but this belief does not have a significant impact on destination loyalty or word-of-mouth recommendations, as shown by the non-significant beta coefficient ($\beta = .056$, $t = .441$, $p = .662$). Overall, these results show how important positive experiences made possible by smart tourism initiatives are for building destination loyalty and word-of-mouth recommendations. It also shows how important technology-driven approaches are for improving tourists' perceptions of how desirable and satisfying a destination is.

Table 6: Descriptive Statistics shows Influence of Intelligent Technologies on Destination Loyalty or Word-of-Mouth Recommendations

Variables	Categories	Frequency	Percentage
Smart tourism initiatives have positively influenced my loyalty to Ireland as a preferred travel destination.	Strongly Disagree	2	3.8
	Disagree	2	3.8
	Neither Agree nor Disagree	6	11.5
	Agree	21	40.4
	Strongly Agree	21	40.4
I am likely to recommend Ireland as a travel destination to friends and family due to the positive experiences enabled by smart tourism initiatives.	Strongly Disagree	1	1.9
	Disagree	3	5.8
	Neither Agree nor Disagree	7	13.5
	Agree	23	44.2
	Strongly Agree	18	34.6
The availability of smart tourism services influences my decision to choose Ireland over other travel destinations.	Strongly Disagree	1	1.9
	Disagree	3	5.8
	Neither Agree nor Disagree	10	19.2
	Agree	20	38.5
	Strongly Agree	18	34.6
Overall, I believe that smart tourism initiatives contribute to a more enjoyable and satisfying travel experience in Ireland.	Strongly Disagree	2	3.8
	Disagree	5	9.6
	Neither Agree nor Disagree	5	9.6
	Agree	26	50.0
	Strongly Agree	14	26.9

In Ireland's tourist business, Table 6 shows the summary data that show how clever technologies have affected location loyalty or word-of-mouth suggestions. The table shows the number of responses and the percentages for four variables that have to do with loyalty to a destination and recommendations: loyalty to Ireland as a preferred travel destination, likelihood of recommending Ireland to friends and family, influence of smart tourism services on destination choice, and belief that smart tourism initiatives make travel more enjoyable and satisfying. For

the question "Smart tourism initiatives have positively influenced my loyalty to Ireland as a preferred travel destination," most of the people who answered (80.8%) either agreed or strongly agreed with the statement. This shows that smart tourism initiatives have a significant positive effect on destination loyalty. Notably, the answers were evenly split, with 40.4% agreeing and 40.4% highly agreeing. This suggests that respondents consistently think that smart tourism efforts have made them more loyal.

A lot of people (78.8%) also said, "I am likely to recommend Ireland as a travel destination to friends and family because of the positive experiences made possible by smart tourism initiatives." Smart tourism efforts that lead to good experiences are very important for getting the word out about a place and making it more appealing to tourists. An important reason why people chose to come to Ireland over other places was that it had smart tourism services. A lot of people (73.1%) who answered said they agreed or highly agreed with this statement. This shows that smart tourism services that are easy to get to and are available are a big part of picking where to visit and bringing tourists to Ireland. Finally, 76.9% of those who answered either agreed or strongly agreed that smart tourism projects made going in Ireland more fun and fulfilling. To this point, it shows how smart tourism efforts are thought to make tourists happier and have better trips in Ireland in general. The overall data in Table 6 show that smart technologies have a significant beneficial effect on how loyal tourists are to destinations, how they choose destinations, and how happy they are with their trips while they are in Ireland.

4.4 Conclusion

The study's findings show how important smart tourism methods are for changing the Irish tourism business and making people happier and more active. Apps for phones and AI have made going a lot better by making it safer, easier to book lodging and transportation, and quicker to get in touch with businesses in the area. Some people are worried about the safety and privacy of data, but it is clear that smart tourist projects make people happier, more loyal to the places they visit, and better at choosing where to go. To meet the needs and wants of modern travellers, the study shows how important it is to keep making changes and new ideas. As tech gets better, the Irish tourist business has more chances to use smart tourism projects. These projects can not only make tourists' trips better, but they can also make people more loyal to the place and bring in new guests through word of mouth. If politicians and people who work in the tourism business

want to make things better in the future, it should address concerns about data security and safety while also pushing the use of smart tourist technologies. By creating an open and encouraging space for new ideas and teamwork, Ireland can become a top tourist location that offers unique experiences and stays on the modren of tourism technology around the world.

Chapter 5: Discussion

The methodology of this dissertation was designed to achieve research objectives: to study the implementation and incorporation of advanced technology and applications in the Irish tourist industry with statistical analysis of data collected through a survey from a sample population; to assess the influence of smart tourism and destination procedures on consumer experiences, behaviours, and overall satisfaction by collecting first-hand information with a close-ended questionnaire; to explore consumers' concerns and attitudes regarding data privacy and security when using these intelligent tourism technologies by incorporating this aspect-related questions in the survey form and to examine the huge influence of intelligent technologies on destination loyalty or word-of-mouth recommendations by using descriptive statistics measures.

The study has been successful in achieving research objectives to greater extent as in terms of first research objective the research participants agreed that as the smart technologies are easy to use and have multiple benefits therefore, travelers are willing to use smart tourism in Ireland. The statistical analysis of data collected through survey from the sample population shows that the positive belief or assumption about a phenomenon develops positive behaviour or attitude of the individual towards it. When the end-user is of the opinion that technology will resolve multiple problems that can otherwise be faced in traditional tourism, there is an increased likelihood to adopt smart technologies and digitalisation. These findings agree with the existent literature, wherein Kachwala and Pai (2022) are of the view that with smart technologies tourists' companies can meet the expectations of consumers. The report by Communication networks and security (2023) also confirms that users prefer smart tourism for its limitless benefits. According to Garanti (2022) the concept of co-creation and value is significant in smart tourism. The use of information and communication technologies enrich tourism services and products (Adelola and Evans, 2019; Ukpadi and Karjaluoto, 2017; Osei et al., 2020). Ardito et al. (2019) also discuss that all stakeholders including suppliers, customers, intermediaries have their own set of benefits with the use of smart technologies in the tourism sector. Hence, findings of current study agree with existing literature that smart tourism creates social, and economic benefits which attract more consumers to tourism.

The research aim to explore the impact of smart tourism and destination procedures on consumer experiences behaviors and overall satisfaction uncovered fascinating findings regarding the direction in which tourism continues to develop. Indeed, upon thorough examination, it is clear that smart technologies incorporated into tourism procedures greatly impact consumer behaviors and satisfaction. The retrieved data from the questionnaires administered to the respondents highlights the profound impact of smart tourism on improving consumer experiences. In this regard, the respondents agree that destination procedures facilitated by smart technologies simplify the process of their travels and lead to increased satisfaction with the tourism experience. Additionally, the statistical findings reveal a clear link between the efficient implementation of smart turism initiatives and improved consumer levels of satisfaction. This is in line with the current body of literature, as such works as Torabi et al. (2023), Jeong and Shiri (2020) and Aliyah et al. (2015) state the critical role of smart tourism inclusive in completely reshaping the consumer experience and satisfaction landscape. Furthermore, the results of the study were consistent with the work of Sampaio et al. (2023); Masseno and Santos (2018); Florido-Benites (2024) that more efficient destination processes powered by smart technologies enchant consumer engagement and dedication to the tourism sphere. Essentially, based on the correlation between the reviewed variables, the research results showed that the degree of smart transformation exhibited by the consumer correlated positively and significantly with the consumer experience, behavior, and satisfaction and commitment to tourism.

The research objective setting to explore the significant impact of intelligent technologies on destination loyalty or willingness-to-recommend results in meaningful quantitative findings on consumer behavior in the area of tourism. The descriptively conducted analysis demonstrates the degree to which smart technologies affect the destination loyalty parameters and the motivation of people to recommend these destinations to their friends and families. People's questionnaire responses and the observation studies' results produce strong confirmation in the shape of high levels of destination loyalty demonstrated by consumers in interaction with the professional entities implementing intelligent technologies in their tourism offers. The distribution of respondents demonstrates constant attempts to visit the destination again or recommend it to others with the intelligent aspect envisioned as a source of convenience and personal approach. Revealing is a substantial increase in the spread of word-of-mouth recommendations on the destinations introduced the intelligent technologies as the performance multiplier in advocacy

and decision-making. These findings seem to correlate with the available body of studies connecting intelligent technologies with destination loyalty and willingness-to-recommend, such as those by Chen and Hu (2020). Additionally, they correlate with the findings of Smith et al. (2022) whose work emphasises that intelligent technologies can enhance how existing or potential tourists perceive the value of the destination over time. Therefore, the findings amount to demonstrating the major play-role effect of intelligent technologies on destination loyalty and willingness-to-recommend aspects to foster the sustainability of developments in the travel industry.

The aim of the research is to investigate the issues and attitudes of consumers regarding data privacy and safety while using tourism technologies. It is an important perspective to research the intricate balance between technology development and consumer trust in the tourism environment. The dissertation has not delved deeply into this research objective due to limited questions on this topic. From the incorporation of the safety and privacy questions in the study's framework of surveys, this study tries to decipher the many lives of consumer fears about the risks of smart tourism adoption. The survey analysis implications depict consumer attitudes and perspectives on the risk of the wrong people getting hold of their things and more access to the personal information that may put them at a higher risk of personal information use and misuse by the providers. Hence, the results show the immediate need for safety and privacy requirements for a shun credence and trust before and during smart tourism adoption. Besides, the analysis also presents a prominent correlation between the identity of people's fear and their willingness to get a try on tourism. Similarly, the reason experts give an example of increased awareness, transparency, and accountability for ensuring trust and credible life. The survey data results correlate from the researcher views and the voice of the industry experts. All agree besiege the tourism stakeholders to prioritise their privacy technologies usage and data ethics. Hence, academia and industry should address the issues and attitudes of people's fear on safety and data privacy since they predict how smart tourism will evolve.

The Technology Acceptance Model is a well-developed framework in which consumers' attitudes towards perceived risks and benefits can be used for predicting and properly analysing their behaviors regarding the adoption of smart tourism technologies. Specifically, the two TAM constructs relate to the individual's readiness to accept new technology are deemed relevant:

perceived usefulness and perceived ease of use. The overarching assumption is that an individual will accept new technology if it is perceived as being useful and straightforward to use. In the context of smart tourism, the risks of personal data are most likely to force consumers to reject or be hesitant to use smart technologies, regardless of the mass realisation of the benefits they provide. Hence, it is essential to eliminate these consumers' fears to increase the perceived usefulness of intelligent tourism technologies.

In addition, how users worry can be conceived with the help of external factors, like risk and trust, considered in the Technology Acceptance Model (TAM). "Risk" refers to the "consequences of technology use" that demonstrate the negative impacts. This factor is in correlation with the current study's findings, as the outcomes indicate customers worrying about their data privacy and security. In the same vein, trust in technology promotes acceptance by decreasing the level of risk perception. If fair and transparent data privacy policies, robust security, and conscientious data processing are adopted, consumers are more likely to accept such technology. Additionally, the subjective norms indicated by TAM are greatly applicable to the present research. Subjective norms refer to whether individuals believe they should or should not adopt new technology based on the beliefs of other close persons. In smart tourism, consumers' perceptions of data privacy and security could be shaped by social influences such as information from friends, relatives, and social media.

In conclusion, the presented research study offers valuable insights regarding the influence of smart tourism processes on the behavior and satisfaction of consumers in the Irish tourism industry. The analysis, completed on a considerable number of respondents, enabled a thorough overview of the development from traditional operational procedures to smart alternatives, as well as provided an evaluation of its implications on different aspects of consumer involvement and satisfaction. Overall, the achieved results demonstrate the importance of smart tourism branches for creating the best experience for consumers. In Ireland, the application of smart technologies in the sphere allows for comprehensive prior arrangements that are fully personalised. This includes all processes from booking a hotel room or visiting several attractions to making it to the destination itself. With the help of the given method, consumers are able to create travel experiences themselves. Furthermore, as the study served to show, smart tourism branches also have a significant effect on the transformation of consumer behavior itself.

The behavior of the clients and customers shortly or is significantly influenced by competent tecnologies. Consequently, the survey results conclude that after the first acquaintance with proper technologies, consumers are glad to re-apply them. Finally, the data showed the existence of a direct connection between smart tourism branches and consumers' overall satisfaction. Based on the provided method, individuals who made use of smart technologies in tourism in Ireland were more satisfied with the process of accommodation, on-sight activities, and the overall result of the trip. In the long run, consequently, the overall competitiveness of the destination is growing, ensuring the growth and sustainability of the travel business in Ireland. However, the analysis also draws attention to an issue that is often neglected in the use of smart technologies, namely data transmission from personal space. Most of the respondents mentioned trust issues and feel uncomfortable using devices that track and store such information. Hence, these factors also need to be addressed by the business. Based on the overall results, the study provides the following implications. First, it claims that there should be long-term investment in the development of the smart tourism foundation, ensuring a satisfactory level of consumer experience within the industry. Second, businesses should ensure the legal and moral use of consumers' personal data providing security procedures. To conclude, the study findings contribute to the understanding of the phenomenon. Thus, with the help of the obtained data, businesses may navigate the issue and properly develop, ensuring a sustainable and progressive future for the field.

Chapter 6: Conclusion

The present study aims to investigate the impact of smart tourism process on consumer behaviour and satisfaction with the use of survey as a data collection strategy in terms of the transformation of conventional operational processes into smart tourism processes of Ireland's tourism industry. The author of the present study employed primary quantitative data with the use of a close-ended questionnaire to collect data about the study topic. The demographic results show that a larger number of women had experienced smart tourism and belonged to the age group of 45-54 years. Most of the participants had frequently visited Ireland. Hence, the findings summarise the females belonging to the age group of 45-54 years had frequently experienced smart tourism while visiting Ireland. The descriptive statistics about the implementation of advanced technology responses reflect that most of the participants expressed positive attitudes, experiences, and perceptions about the use of mobile apps, AI and other smart technologies in the tourism and hospitality sector. A large number of participants agree that digital technology has improved accommodation and booking processes in Ireland. Overall, there is better safety and security for travellers compared to conventional processes in tourism and hospitality.

The statistical analysis of data with the use of inferential statistics reflects that there is a positive relationship between smart tourism and consumer experience. The study found a positive correlation between the decision to travel to a destination and smart tourism. When tourists have positive experiences with the use of digital technologies, they are more likely to revisit those places. Furthermore, a positive word-of – encourages more travellers to make a trip to Ireland. Smart technologies facilitate improved interaction with local businesses which ultimately leads to recurrent visits of travelers. Smart technologies are easy to use and bring several benefits therefore, there is rapid adoption of this smart technology by the hospitality sector. Several benefits expressed in the close-ended questionnaire are facility in booking, better information about the target destination and enhanced interpersonal relationships with locals. The research participants strongly recommend a visit to Ireland due to its smart tourism characteristics.

According to the findings of the study, the following recommendations can be made to policy makers and practitioners in the tourism sector, and in Ireland in particular, in order to take advantage of the benefits of smart tourism:

- Policy makers should invest in smart tourism infrastructure, including mobile apps, AI technologies, and other digital solutions to improve visitors' experiences. This can be done by launching initiatives to increase Wi-Fi coverage in tourist areas, creating mobile applications for tourists, and projects of a similar type.

- Companies should design training and development programs for tourism professionals in order to increase their competence in the use of smart technologies and service quality according to their use. To achieve this, governmental agencies, educational bodies, and key industry players may collaborate to develop training programs and workshops on smart tourism practices.

- Practitioners should develop targeted marketing campaigns that capitalise on satisfied tourists' experiences in Ireland as a smart tourism destination. These campaigns can illustrate the beneficial effects of smart technologies on visitors, such as the ease of booking due to the availability of data and the possibility to compare different providers, and mobile apps which enhance safety and security

- Policy makers should build closer links between the government and the private sector to secure funding and obtain support for the development and implementation of smart tourism projects. Collaboration between public and private entities in funding smart tourism projects can be achieved by establishing joint funding mechanisms, grant and incentive programs, research agreements, or any combination of these strategies to support smart tourism practices in Ireland.

- Some kind of monitoring and feedback mechanisms should be established to assess the results of smart tourism practices and provide continuous feedback. Feedback can be obtained by collecting visitor feedback, conducting surveys, or collecting data from various sources to measure the effects of smart technologies on consumer behavior in tourism.

6.1 Suggestion for Future Study

Regarding future research activities, several aspects derived from this study could be further investigated. First of all, future researchers could conduct comparative analyses not only across different time frames in the same country but also between Ireland and other countries that also adopt smart tourism processes. Comparative analyses between countries could help to identify the differences and similarities between various cultures and economic conditions. Another topic is the need for a longitudinal study to track the evolution of consumer behavior and satisfaction. As smart tourism technologies become more integrated, consumer expectations and preference may also change. Other topics can investigate the way transformation into smart tourism will affect local communities not only on an economic level but also in terms of culture consuming. Finally, future researchers could also investigate what barriers businesses and tourists face when using these technologies. Barriers could be of different nature. The major strength of these studies could be to identify detrimental factors and develop ways to overcome them. Overall, the research should be conducted using a qualitative design to discover personal experiences of inspiration from technology, investigate whether or not it is the case, and, if it is – in what amount. Additionally, the researchers could explore the issue of security and privacy. Information is a valuable asset. If tourism destinations have access to large amounts of data, there is a concern that this information could be accessed by a third party. A correlation study between the fear of losing data or having private information heavily analysed by tourism destination's software may also yield interesting results.

6.2 Study Limitations

The primary quantitative study has limitations in addition to its valuable insights obtained through statistical analysis. Identifying limitations is important for measuring the results objectively and planning further research. Among other limitations, one could note the sampling error. The sample may not be representative of the general population which could influence the ability to generalise the results. In addition, quantitative studies might ignore the context or variables that remain unexplored underneath the numbers. The survey may lack the depth of figure and the study might remain superficial. Another limitation is in the sample sise, the study included less than a hundred participants, and many did not respond to the survey. The results might not be representative and be biased. Considering that the current study is cross-sectional

and provides the status at one point in time, it is impossible to measure changes over time or the direction of the flow. Finally, the study has strong internal validity but the issue of external validity raises concerns.

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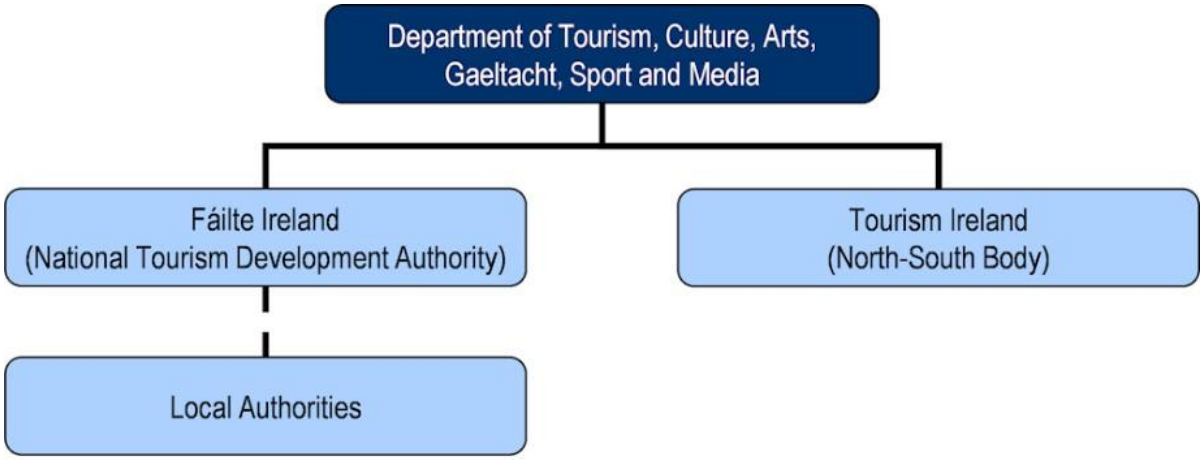
Appendix 1: Tourism bodies of Ireland



Source: OECD, adapted from the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, 2022.

Appendix 2: Close-ended questionnaire

Demographic Information:

1. Age:

- 18-24
- 25-30
- 31-40
- 41-50
- 51 or above

2. Gender:

- Male
- Female
- Non-binary/Third gender

3. Education Level:

- High School or below
- Bachelor's Degree
- Master's Degree
- Doctorate or above

4. Employment Status:

- Employed full-time
- Employed part-time
- Unemployed

- Student
- Other

1. I am aware of various marketing strategies employed by businesses on social media platforms.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

2. Social media marketing is an important factor influencing purchasing decisions.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

3. I pay attention to advertisements and promotions on social media.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

4. Social media marketing has influenced my decisions to make purchases online.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

5. I trust recommendations from social media influencers when making online purchases.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

6. I am more likely to buy a product if it is recommended by someone on social media.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

7. I frequently purchase clothing and fashion items online.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

8. I frequently purchase electronic gadgets and accessories online.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

9. I frequently purchase beauty and personal care products online.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

10. I frequently purchase food and groceries online.

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

11. I am likely to recommend products to others if I see them advertised on social media.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

12. I often share posts about products or brands on social media.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

13. I believe that products promoted on social media are usually of good quality.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Submission of Thesis and Dissertation

National College of Ireland
Research Students Declaration Form
(Thesis/Author Declaration Form)

Name: SENANUR YAYLI

Student Number: 22161040

Degree for which thesis is submitted: Master of Science in Entrepreneurship

Title of Thesis: Impact of Smart Tourism Process on Consumer Behaviour and Satisfaction. A Survey Analysis Regarding Transformation of Conventional Operational Processes into Smart Tourism Processes of Ireland Tourism Industry

Date: 05/05/2024

Material submitted for award.

A. I declare that this work submitted has been composed by myself. Yes

B. I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged.
Yes

C. I agree to my thesis being deposited in the NCI Library online.
open access repository NORMA. Yes

D. ***Either*** *I declare that no material contained in the thesis has been used in any other submission for an academic award.
Or *I declare that the following material contained in the thesis formed part of a submission for the award of

_____
(State the award and the awarding body and list the material below) *Yes*