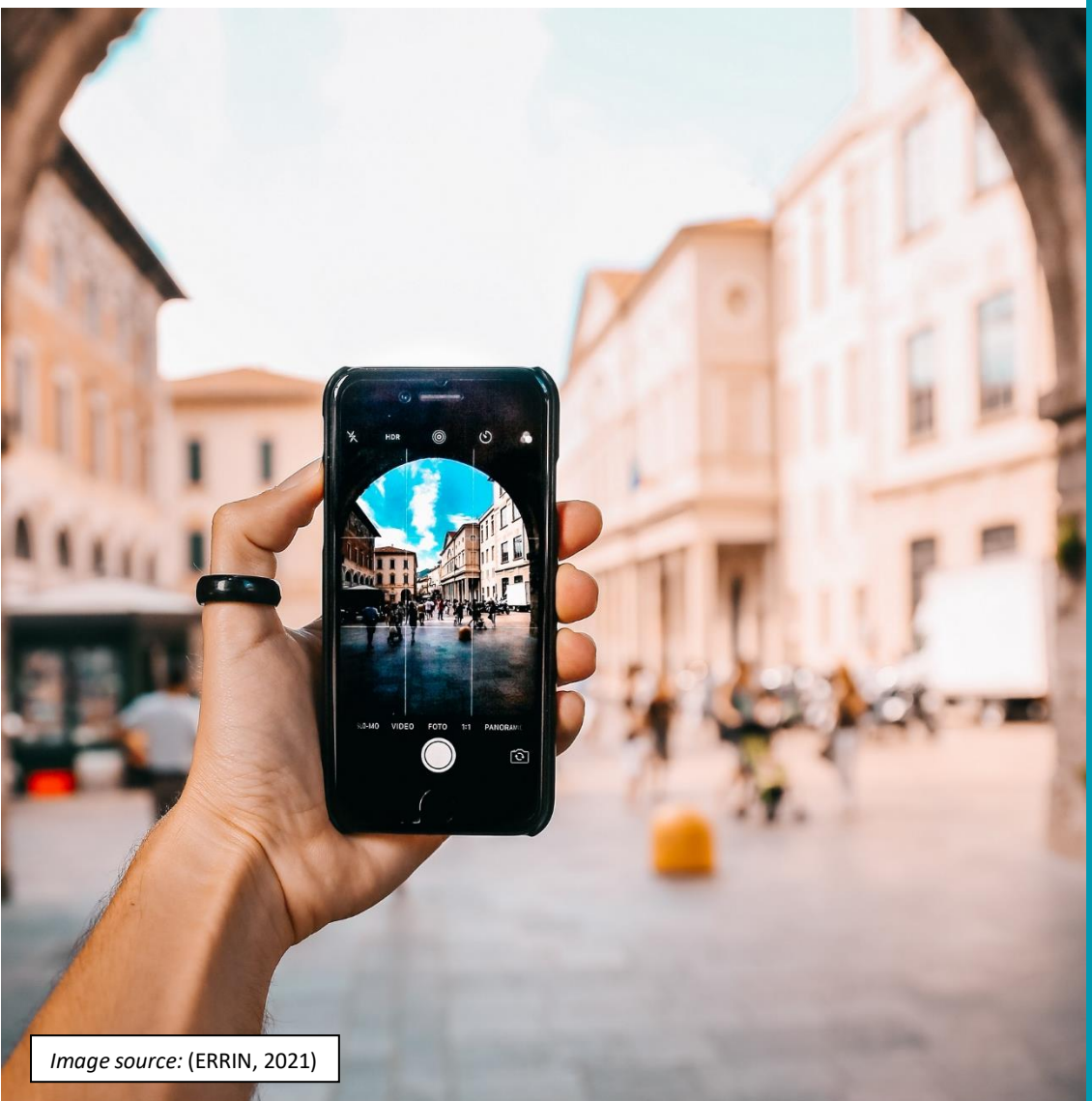
Carruthers, Lauren

Feasibility of Kainuu, Finland as a Smart Tourist Destination



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Abstract

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The development of tourist destinations into Smart Destinations is a growing phenomenon worldwide, with the implementation of Information and Communication Technologies (ICTs) and smart solutions giving forward-thinking destinations a competitive edge in the local and international market. The use of ICTs can be beneficial to a destination, however there are also significant limitations and drawbacks to their impact on tourist experiences. This paper discusses what Smart Destinations are in theory, how they function in practice with qualitative research into the case studies of Spain and Benidorm, and whether Kainuu is a feasible destination to benefit from pursuing a Smart Destination tourism strategy.

Contents

List of Initialisms and Key Terms

DMC – Destination Management Corporation

DMO – Destination Management Organisation

ICT – Information and Communication Technology

Smart Destination – a tourist destination with administratively controlled and strategic implementation of ICTs and digital smart solutions to increase competitiveness.

Smart Solutions – a general term for technology-based systems, services, of software that provide some function to users or implementors.

1 Introduction

Digitalisation, smart solutions, and Information and Communication Technologies (ICTs) are fast becoming integrated into modern tourism strategies around the world. The pursuit of ICTs for marketing, data harvesting, coordination, program services, and commodification can see destinations increase their competitiveness in a local or international market. This paper will explore what it means to be a Smart Destination, particularly with the use of the Smart Destination Model as put forth by the UN World Tourism Organisation, and how smart solutions can impact destinations, with a particular focus on the case studies of Spain and Benidorm.

Qualitative research analysis of the aforementioned case studies provides an example as to the benefits, limitations, and drawbacks of a Smart Destination strategy. These, in turn, will be applied to the context of Kainuu, Finland in order to understand how, where, and why ICTs and smart solutions could affect Kainuu as a tourist destination. These findings will indicate the feasibility of Kainuu as a Smart Destination. The conclusion will offer recommendations for further research based upon the ultimate findings.

Particular emphasis is placed upon the use of technology and the role of Destination Management Organisations (DMOs) as these make up the foundation of any Smart Destination strategy. The latter portion of the paper will explore the feasibility of a DMO in Kainuu based upon existing examples, the feasibility of an innovation-based entrepreneurship spirit, the feasibility of technological infrastructure in Kainuu informed by the previously discussed case studies, the feasibility of Kainuu as an accessible destination particularly as facilitated by ICTs, and feasibility of sustainability and sustainable practice in Kainuu.

In compounding the theoretical and practical contextualised information explored throughout this paper, an informed understanding of Kainuu's feasibility as a Smart Destination will be concluded. The informed limitations and drawbacks will be made clear to provide a sound and credible conclusion upon which further development can be founded.

2 Establishing Background – Feasibility Studies

This section will discuss the meta role and structure of the feasibility study in order to justify its utilisation in establishing a Smart Destination Strategy in Kainuu. In this way, the functionality of the feasibility study both in general and in this specific instance will be justified, and a projection of the study's progression will be provided in detail.

Following this, the basic foundational concepts of what a feasibility study is will be addressed in order to solidify the predominant concerns of this report. A description of the concept will be provided, as well as deeper analysis into, for example, the role of a feasibility study in the project development process. The guiding question that runs concurrent throughout this study will be established and explored: that of "to what extent can Kainuu benefit from the Smart Destination Model?".

This section will provide a theoretical description of what a feasibility study is, its relationship to a business plan and how the two works differ, the purpose of a feasibility study in the process of establishing a new project, enterprise, or business; as well as the supplementary information that a feasibility study can garner, such as potential challenges, threats, and opportunities in the business venture. Theoretical information will be imparted by both electronic and literary sources.

By reading and understanding the study's theoretical sections, the guiding question that the study aims to answer will be established and justified, giving way to the latter half of the study which will go on to contextualise that question in its practical setting.

2.1 How The Feasibility Study Will Be Conducted: Meta-Analysis

The feasibility study itself will be conducted using qualitative methods of case study analysis to be compared and analysed alongside appropriate theoretical information. The initial sections will outline the basic guiding concepts of the feasibility study itself – what it is, its function, its use, and its appropriateness to the subject at hand – and that of the DMC both generally and in a Finnish context. The methods utilised throughout the study will predominately consist of online and literary research, case study analysis, and comparisons between intel gleaned from research and the theory presented in the initial sections of the study.

In the closing statement, an informed conclusion will be drawn as to whether or not a Smart Destination Strategy in Kainuu would be viable, and, if so, to what extent. Challenges and risks will also be reiterated concisely based upon findings established in the study.

2.2 What Is a Feasibility Study and What Is Its Role in Organisational Development?

A feasibility study is an analysis that determines the viability of a project or idea. It is an essential part in project development, particularly for an entirely novel concept without benchmarking metrics or similar potential comparisons. In analysing the technical, economic, legal, operational, and time feasibility, as well as logistical factors such as tools and resources, an idea can be loosely contextualised and determined to be either feasible or not. (Bridges, 2021)

Feasibility studies are usually conducted before the planning stage in development in order to establish viability in advance, and thus prevent unnecessary extrapolation beyond the initial determination of whether or not an idea is viable at all. In considering all the possible aspects of an idea's functionality in its operational context, the likelihood of success can be gauged with relative accuracy. (Drury & Williams, 2023) It also serves to identify potential risks, threats, and opportunities of a development idea which can be mitigated or pursued at a later stage.

The level of detail in a feasibility study is important in the overall developmental process, as the projected costs and benefits can be broken down into constituent parts to be explored in greater depth during the planning phase (Talerico, 2023). This feasibility report will go into an appropriate level of detail for the scope of the study. It is not intended to serve as a solid business plan, but rather as a guiding and informed suggestion as to whether or not the concept of a Smart Destination Strategy would be financially, functionally, and structurally feasible in the time and locational context.

In practice, feasibility studies seek to outline the prospective company's ability to generate revenue, and answers questions such as: from where can revenue be earned, is the amount of revenue generated enough to turn a profit, is the source of revenue consistent enough to ensure the company can operate over an extended period of time, is the market stable enough to guarantee the company's growth, and other similar questions (Market Business News, 2020). In responding to these questions, prospective partnerships are proposed as well as the identification of competitors, and it is necessary to conduct field studies relating to the area of operation, the evalua-

tion of marketing strategies, and in-depth target segment analyses. This type of informed projection is beyond the scope of this particular study, however it is important to understand how feasibility studies in general can be used in the business development process.

2.3 Structure of a Feasibility Study

The structure of feasibility studies are flexible in order to adhere to the needs of the entity issuing the study (Bridges, 2021); however, in general, they are comprised of the following points, (Drury & Williams, 2023):

1. A primary description of the proposed product or service is outlined, detailing what it is, how it works, who its user base is, why it is needed, and other foundational concerns in order to justify the need for the study.

2. Logistical technologies are laid out to understand the practical operation of the product. This section asks the question of "what will it take?" and provide answers in the positive or negative, with informed conclusions. If conclusions are predominately in the negative, this section will explain how and from where resources can be garnered and at what cost.

3. A contextual bedrock is put forth consisting of the current market, customers, competitors, and potential partners. This is largely similar to a product plan but may constitute a preliminary analysis of the projected market. It may also involve getting feedback from potential partners and stakeholders.

4. A marketing strategy is devised based upon the findings of the prior section and may constitute a stand-alone report.

5. Organisational and staffing projections are informed by the aforementioned operational demands gleaned from all of the previous sections combined. It seeks to identify the labour costs required for the establishment and operation of the object of the study.

6. A schedule is outlined for implementation of the findings, which may include a follow-up business plan, a contingency plan, and other theoretical assessments relating to operation. A concrete timeline of development and active implementation can be projected based upon the findings of this section.

7. Financial projections including references to the previous sections determine the financial viability of the project. This may include an income statement including revenue, operating costs, and profit, and takes into account the previously-determined marketing strategy, technical requirements, labour and staffing costs, and financial intrigue on the behalf of proposed customers and stakeholders.

8. Final findings are laid out and recommendations given for either halting development or continuing on into the next planning stage.

This structure can also change depending on the type of feasibility study, of which there are several as the determinates of feasibility can be broken down into constituent parts in order to meet the planner's needs, such as time feasibility, technical feasibility, legal feasibility, and economic feasibility, among others (Drury & Williams, 2023). This study, in seeking to understand the role and function of the feasibility study in general, will comprise each of these constituent parts with appropriate relevance.

It may be noted that the level of detail laid out above will not be instituted in this study, but rather was laid out in order for the reader to understand the form and function of feasibility studies in a practical business context. As the aim of this particular study is primarily to provide a theoretical framework for further developmental study, such as a concrete business plan, the depth of exploration will reflect that aim.

2.4 Relationship Between a Feasibility Study and a Business Plan

It is important to understand that a feasibility study and a business plan are distinct from one another and serve different purposes in the developmental process of a novel idea or product. A feasibility study is primarily conducted before the commencement of an official business plan, as the feasibility study acts as an analysis of the product's viability and functionality. The feasibility plan itself may serve to incite investment in a business plan and invite prospective partners and stakeholders to pursue a more detailed business plan if the projected product is deemed viable in the initial stage (Drury & Williams, 2023.)

In relation to a business plan, one can summarise the difference between the two types of studies by understanding that a feasibility study outlines whether or not an entity can function, whereas a business plan states *how* it will function (Market Business News, 2020). It may be therefore

surmised that of the two, the business plan is much richer in detail and concrete practicalities than the feasibility study. This does not mean that the feasibility study itself deals only in the abstract, but that the two work together, with one providing a springboard to the other, for an informed, detailed, and referenced insight into the operation of a marketable concept.

Similarities	Differences
• Timing: both studies are conducted before the establishment of a new business. • Participation: various specialists participate in the completion of both works, such as accountants, financial advisors, and other entrepreneurs with prior experience. • Content: some aspects of the content are the same or similar, like target segment analysis, marketing strategies, distribution channel and finance forecasting. • Demonstrability: both documents serve to predict the functionality of a new company and can be offered to prospective investors.	• Purpose: feasibility studies analyse the extent of success based upon a business idea; a business plan outlines how the business will function in greater detail. • Procedure: feasibility studies aim to provide a prospective entrepreneur with theoretically and practically supported research of whether or not a business idea is viable; a business plan is written under the assumption that the idea is already viable and concerns itself with a future projection of company functionality. • Idea vs operation: feasibility studies concern themselves with the risks and prospects of the company idea; business plans are concerned with the risks associated with the company's operation.

Table 1 provides similarities and differences between a feasibility study and a business plan (Bean-Mellinger, 2019).

This table provides some cursory information as to the key differences that set a feasibility study and a business plan apart from one another. It is by no means an exhaustive list, but serves to identify the key oppositions between the two types of study and therefore justifies the creation

and implementation of both in the product development process. This feasibility study may therefore be seen to set up the framework for further study into what may comprise a business plan centred around the predominate core of research for this study.

3 Smart Destination Concept and Model

The concept of a distinct “smart destination” has arisen in recent years from the “smart city” approach to urban planning, in which modern Information and Communication Technologies (ICTs) are utilised to improve the quality of city life (Yin et al., 2015). The term ICT refers to technologies that digitise information and communication channels in order to minimise or remove barriers to people seeking to access information, as well as the collection of data to “support monitor, and improve urban infrastructures such as transportation, waste management, energy consumption, and emergency response” (Halegoua, 2020). Other sectors of urban life such as the economy, culture, and entertainment have all been subjected to ICTs and continue to operate under ICT management to the extent that the “smart city” strategy is already firmly established. There are positive and negative sides to the role of ICTs in urban infrastructure, which this study will explore and consider in formulating an understanding of their applicability to the Kainuu context.

Whilst originally centred solely upon the urban city, this concept of “smartness” has expanded to include destinations of any kind and has been adopted into the tourism sector lexicon as a model by which to develop a destination’s competitiveness; however, as its scope has expanded, so has its applicability.

As there is no recognised metric or criterion to determine empirically if a city or destination is “smart” or not, labelling one as such is a political and ideological choice (Halegoua, 2020). Its usage is intended to convey an image of technological and logistical superiority, aiding a destination’s branding, and so increasing its competitiveness against rival destinations. That does not mean that the term itself is completely empty as the Smart Destination Model provides a framework to understand and implement “smartness” in the development of a tourist destination.

This section will explore the Smart Destination Model in theory, including its five pillars of operation, the practical case study of Spain which has been making strides to implement the Model since their introduction of the Smart Tourism Destination project in 2019, and the limitations of the Model and the Smart Destination concept. By understanding the Model’s purpose in theory and its realisation in practice, the benefits and limitations of developing a tourist destination into a Smart Destination will become clear.

3.1 Pillars of the Smart Destination Model

The concept of "smartness" has developed beyond the mere implementation of ICTs, but has come to embody an attitude of forward-thinking, holistic, and sustainable practice that has been codified into the Smart Destination Model. The Model is comprised of five core pillars as laid out by the UN World Tourism Organisation (UN World Tourism Organisation, 2019; Sorokina et al., 2022). They are as follows:

1. Governance: This term ought to be understood not to necessarily refer to the government itself, but to governance of the Smart Destination by an invested body charged with guiding the disparate stakeholders that comprise that destination towards the goal of fulfilling the Smart Destination Model's objectives. This can be in reference to a local government or city council, a DMO, DMC, or other such management institution. The function of governance within the Smart Destination Model involves ICTs to coordinate and communicate with multiple stakeholders in the destination as well as visitors and the local population. In this instance, the term "e-governance" has been coined to refer to governance executed through ICTs (Sorokina et al., 2022). E-governance has been put forward as requiring seven key descriptors inherent to its operation: it must be transparent, meaning that citizens can get clear knowledge of the governing body's operations; participatory, in that citizens can participate in the governing body's legislation and praxis; anticipatory, where the governing body initiates service delivery to its citizens; personalised, where citizens have the freedom and ability to choose how they wish to receive services; co-created, by both the governing body and citizens in a collaborative effort; context-aware, whereby service providers understand and are aware of the service delivery process; and context-smart, that service providers can utilise context-awareness to deliver their services (Bertot et al., 2016).

   A Smart Destination is one that "correctly identifies its strengths and opportunities, and that, moreover, properly coordinates the available – and usually limited – resources to yield the maximum productivity of the areas the comprise it." (Priano et al., 2019). This emphasis on coordination can be seen to facilitate the expectation of some governing or guiding body.

2. Innovation: This point promotes the innovation of state-of-the-art technologies, practices, and mindsets going forward in the development of the Smart Destination (Gretzel,

2018). It also serves as a reminder that Smart Destinations are constantly in motion, moving ahead incessantly and competitively into an evolving future. The overseeing or governing body guiding the development of a Smart Destination must conduct operations with the notion of innovation in mind to aim for the cutting edge in a competitive context. It may also be emphasised that though innovative technologies are prescient, technology does not make up the entirety of an innovation-centred operation. The less tangible concepts of social behaviour, accessibility, sustainability, attitudes, design, and language are also constantly changing and can facilitate innovative development across the board.

3. Technology: This refers to the technological infrastructure in a destination that can be used by both visitors and locals. It may be argued that technology, particularly ICTs, is at the heart of the Smart Destination Model and is the means by which all other aspects of the model can be realised. To quote a research paper on the construction of a smart destination framework, "the core characteristic of a smart destination is the integration of technology into the existing physical infrastructures, so that technology is entrenched within the surrounding environment making it pervasive and all-embracing" (Sorokina et al., 2022).

   The jargon of technology can be found everywhere in resources on the subject, with aspirational terms such as *digitisation*, *digital ecosystem*, *Internet of Things*, *cloud computing*, and *big data analytics* cropping up constantly. For the purposes of this section and its constraints, the focus will remain on two main topics: ICT as it relates to the Smart Destination Model, and how data collection can benefit a destination.

   As explored above, ICT stands for Information and Communication Technology, and is a way by which information is both distributed and obtained, and a method of digital communication; however, beneath the outer infrastructure is the need to communicate within the multi-faceted network that makes up a tourist destination. This can be communication between stakeholder companies, such as Business to Business communication; communication with visitors, in the advertising of amenities, distribution of information, and so on; communication with partners, such as other destinations or parent organisations; and communication with both locals and visitors, in the dissemination of logistical information such as transport timetables, upcoming events, and other things of a similar nature. It may be noted here that frequently in literature on the subject, the groups of visitors and locals are often merged into one, indistinct from the other, as both

groups benefit equally from the Smart Destination Model and are considered of equal important within its metric (Sorokina et al., 2022).

Data collection is an extremely useful tool that a destination without a DMO or governing body is lacking. Data can be derived from physical infrastructure, social connections, organisational sources, and online portals that can provide valuable information on a wide swathe of variables, such as customer behaviour, search trends, feedback, shared experiences, and more, which can inform and guide innovation into future development (Gretzel, 2018). This aspect of the third pillar, while beneficial in ways, also comes with significant drawbacks that must be recognised and addressed in the development of a Smart Destination, particularly in reference to privacy, surveillance, and monitoring behaviours.

4. Accessibility: This is the concept of striving to make physical, digital, and attitudinal infrastructure accessible to all, regardless of ability. In practice, accessibility manifests in various ways. Standardisation is one simple and yet extremely important method by which accessibility can be implemented, as by standardising formatting, signage, and other such metrics, visitors and locals alike can be more able to understand the nature of what it is they will encounter before the encounter takes place.

   The pursuit of barrier-free infrastructure is also a key part of this phase, wherein physical spaces as well as digital are freed from handicaps and barriers to use. This may be as straightforward as erecting lifts and ramps in a physical location, implementing text-to-speech software on a digital platform, or promoting creative arts produced by people with disabilities with people with disabilities in mind, such as sign language theatre plays.

   Accessibility is an extremely broad and complex topic well beyond the scope of this section but suffice to say that the term as it functions within the Smart Destination Model refers not to providing services for people with disabilities, but to developing and elevating the entire physical and digital space of a destination to remove barriers and ensure that all can access spaces independently and equitably. Therefore, this aspect of the Model works intrinsically with the other aspects as they complement one another in the overall development of a smart destination.

5. Sustainability: Though one may immediately think of the environment when considering the term “sustainability”, in the Model sustainability refers not only to environmental sustainability but to economic and socio-cultural sustainability (Escobar & Margherita,

2021). This means that policies and actions taken today will come at no detriment to the future, but rather support and promote further development into the future as well. This is particularly prescient in the tourism context, as overtourism is a very real concern for destinations of all kinds.

ICTs have been touted as a way by which sustainability can be implemented in the pursuit of the Smart Destination Model (Escobar & Margherita, 2021). In particular, the agency of the tourist as provided by ICTs is seen to foster greater freedom and exploration in a destination, thus lessening the load on popular attractions already suffering from over-tourism. This, in turn, increases the quality of life of local residents from which the burden of overtourism is eased.

This final pillar of the Model is by no means the least, though it tends to be the least valued particularly in comparison to the third pillar of technology (Escobar & Margherita, 2021). This pillar is comprised of environmental, economic, and socio-cultural sustainability and their concerns. Environmental sustainability pertains to the optimal use and protection of natural heritage and biodiversity. Economic sustainability is concerned with secure employment, income-earning opportunities, and poverty alleviation. Socio-cultural sustainability deals with the respect of the socio-cultural heritage of the destination, traditional values, and intercultural understanding. All of these examples fall under the purview of this last yet equally important pillar of the Smart Destination Model.

Studies have shown that the utilisation of the Smart Destination Model provides a “better future for tourism-based economies” (Escobar & Margherita, 2021), particularly in its promotion of environmental, economic, and socio-cultural sustainability, and that there is a positive relationship between the Smart Tourism Model strategy and sustainability. Particularly in regional areas apart from urban centres, the role of DMOs has been highlighted by researchers as playing an extremely important part as the driving implementor of Smart Destination strategies (Gretzel, 2018), with one peer-reviewed study insisting that the Smart Destination Model and its vision “should be at the core of DMO activities in their implementation and management of smart activities” (Sorokina et al., 2022), whilst another empirical study insists that a DMO can “achieve sustainability” by adhering to the Smart Destination Model (Escobar & Margherita, 2021).

3.2 Case Study: Spain, Benidorm

This Smart Destination strategy has gained traction particularly in Spain, which has become a world leader in smart development, as seen in the nation-wide Smart Tourism Destination project initiated by the Secretariat of State for Tourism SEGITTUR wherein smart tourism initiatives are encouraged, funded, and guided by the national government (Sociedad Mercantil Estatal para la Gestión de la Innovación y las Tecnologías Turísticas, n.d.).

In the Spanish case, the implementation of the Smart Destination Model and its five pillars is directed by branches of the national government and operates within both the public and private sector. It has established a Smart Destination Network as of February 2019 which involves the public sector, private sector, academic sector, and other outside actors to promote the holistic development of both the entire country and its constituent destinations. At time of writing, the Network consists of 635 members of which 454 are destinations, 91 are companies, and 87 are institutions as can be seen in Image 1 below (Sociedad Mercantil Estatal para la Gestión de la Innovación y las Tecnologías Turísticas, 2022).

Image 1: Smart Destinations Network Spain (Destinos Inteligentes, 2022).

This has ensured that Spain remains at the cutting edge of Smart Destination development and serves as a benchmark for other emerging states and institutions to emulate. This can be seen in Latin American countries, such as Mexico and Colombia, and China, whose own domestic tourism

strategies have adopted aspects of the Smart Destination strategy as pioneered by Spain (Ivars-Baidal et al., 2023).

Spain's development towards smart initiatives relies heavily on funding from the European Union (La Moncloa, 2020). This may be taken to indicate that any formal strategy undertaken within Finland would also benefit from European Union funding.

Studies have been conducted to examine the benefits and limitations of the Smart Destination in practice in Spain, which this section will explore, with a particular interest in the tourism destination of Benidorm, which has been established as a leading Smart Tourism Destination in both Spain and the global context. The case of Benidorm, as one of Spain's most developed Smart Destinations, provides an illustrative example of a Smart Destination in practice both to the managerial administration and to the tourists who visit and use the destination's services. It may be noted here that in the case of Benidorm, the aforementioned Smart Destination Model is not the foundation of their development towards becoming a Smart Destination. Rather, the primary pillars that comprise their project's base are governance, sustainability, innovation, connectivity, information systems, and smart solutions as can be seen in Figure 1 below.

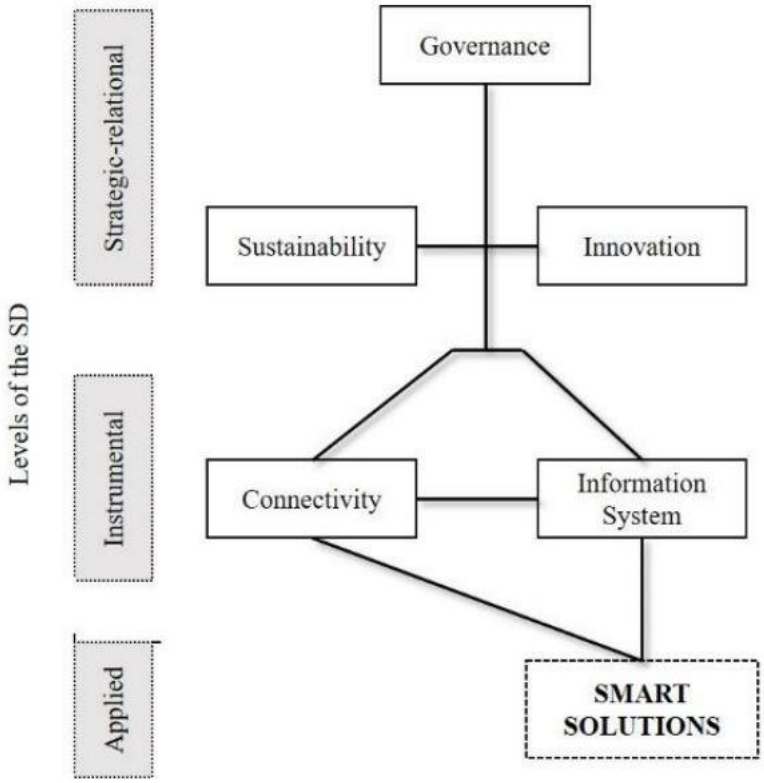

Figure 1: Smart Tourism Destination foundational solutions in Spain's domestic strategy (Femenia-Serra & Ivars-Baidal, 2018).

3.2.1 Planning and Management Processes

Smart Destinations are characterised by their use of ICTs and data processing to facilitate a higher level of communication among stakeholders, leading to more informed decision-making and a greater understanding of tourists' needs and behaviours (Femenia-Serra & Ivars-Baidal, 2018). The utilisation of ICTs allows for real-time and context-aware responses to tourist needs, which promotes superior services and experiences than in destinations without embedded ICT infrastructure – otherwise described as "smart solutions". Smart solutions are touted as "technology-based applications and tools a smart destination DMO can employ to fulfil its objectives, namely enrich its visitors' experiences and its own management processes" (Femenia-Serra & Ivars-Baidal, 2018). This section seeks to address what those processes are in practice in order to understand the logistical implementation and management of a Smart Destination.

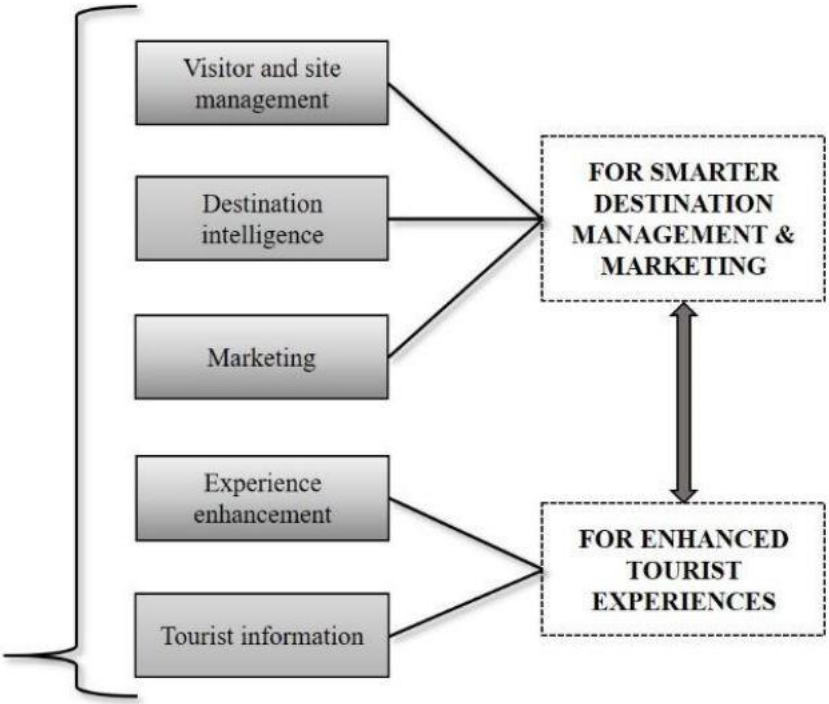

Figure 2: Smart Tourism Destination solutions and their dual purpose of destinations and tourist experiences (Femenia-Serra & Ivars-Baidal, 2018).

Some concrete examples of smart solutions in practice are public, extensive, and free access to WiFi; tools for big data analysis; advanced and integrated DMO websites and online platforms, utilisation of QR codes and geotags, virtual and augmented reality, destination apps, chatbots, and social media actions. Smart Destinations are expected to formulate and manage a singular platform or system to house and process that data gleaned from ICTs and to quantify as much as

is possible of tourists' behaviour. This may be through tourists' spending transaction data, real-time monitoring of booking activities across various sectors (such as accommodation, food and beverage, and program services), contextual utilisation of service apps such as ride-hailing and food delivery, online check-in data via social media, and so on.

Big data analysis frequently incorporates the following processes (Ivars-Baidal et al., 2023):

1. Data capture: the gathering of data using different types of sensors, such as meteorological data, data on air pollution, noise pollution, or the aforementioned data accumulated from tourist behaviours.

2. Data analysis: utilising big data processing software.

3. Data crossing: or crossing for comparison such as creating layers of available information to track processes and trends.

4. Communication: wherein the findings of the three former points are communicated freely and made accessible to all potential partners and stakeholders in the destination to improve the transparency of information and favour innovation.

The utilisation of data processing and dissemination is therefore a key aspect of developing a destination into a Smart Destination; however, though the theory is sound, the practical reality in Spain at large has been shown to be lagging behind. This is due to contractual issues, difficulties in integrating and operating the technological systems required, confused and experimental projects, and with a significant discrepancy between a small group of highly-developed urban centres and the rest of the destinations within the Smart Destination Network. (Buhalis et al., 2012)

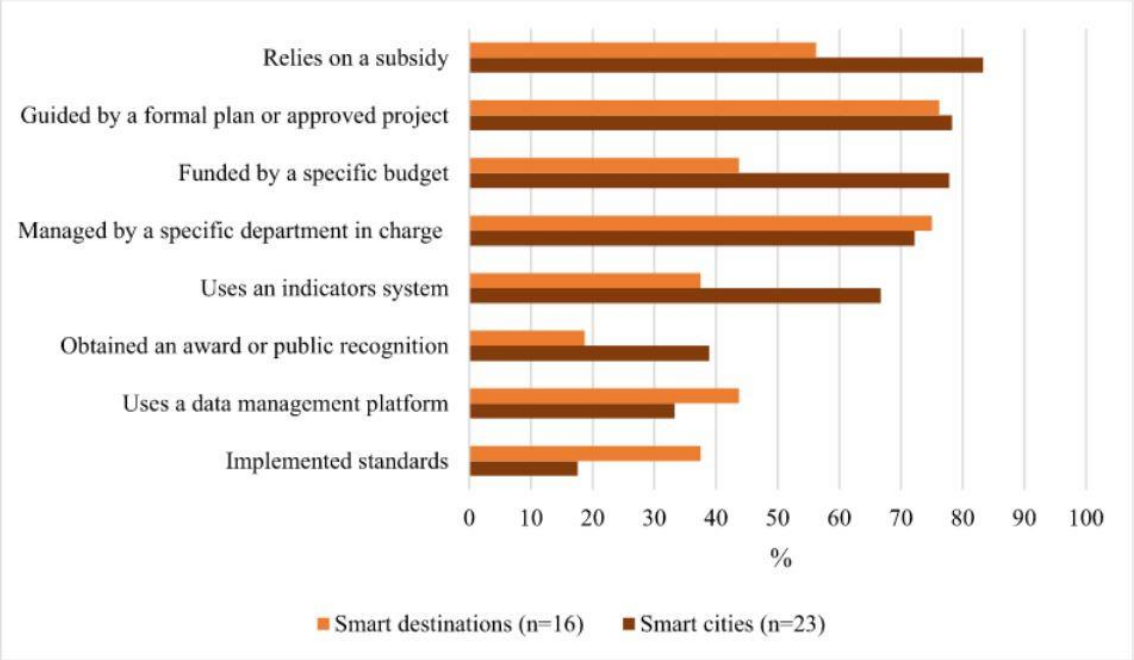

Figure 3: Characteristics of Spanish smart cities and destinations (Ivars-Baidal et al., 2023).

The above graph shows a comparison between the characteristics of Smart Cities and Smart Destinations in Spain. Of particular note to this study is the presence of coordinated governance in the Smart Destination and the prominence of a guiding plan or project. This indicates the need for concentrated, administrative responsibility in overseeing the development of a Smart Destination. In the case of Spain, this is headed by the government which coordinates multiple actors at play in tourism management. In the case of Benidorm specifically, its local DMO, Visit Benidorm, is responsible for guiding the initiative in close partnership with government actors (Visit Benidorm, 2023).

Visit Benidorm has utilised twenty-four smart solutions in its development towards achieving Smart Destination status.

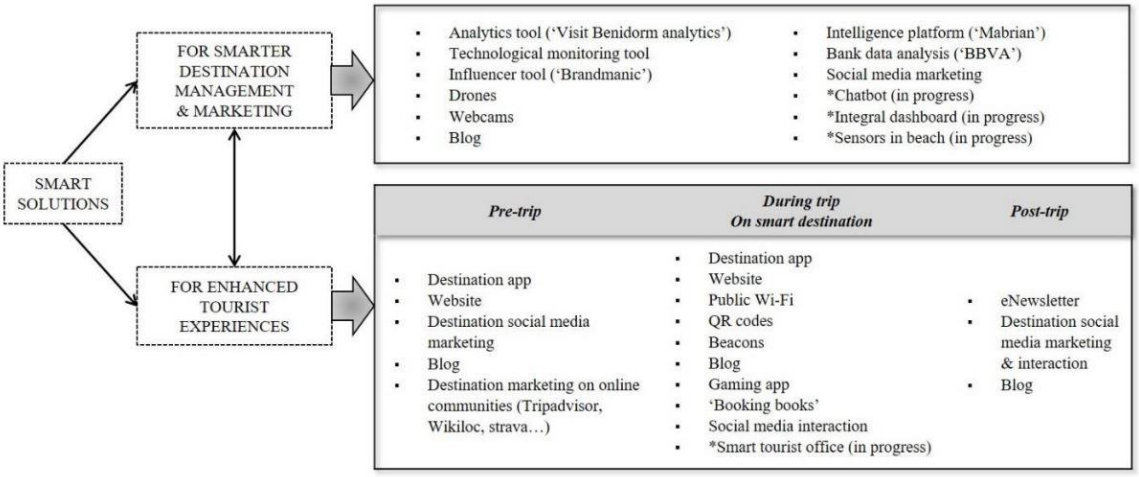

Figure 4: Visit Benidorm smart solutions and associated facilitators (Femenia-Serra & Ivars-Baidal, 2018).

As the above figure indicates, the pre-trip booking phase, on-site holiday phase, and post-trip phase of the tourist's locational experience are all taken into consideration and incorporated into the Smart Destination strategy. The coordinated and specified employment of certain smart solutions is significant in that a wide potential can be reached by way of varied types of ICT applications.

These methods are facilitated by close partnerships with private companies, particularly tech start-ups, limited and controlled spending on each individual solution, a flexible design based upon contemporary needs, and born of a need for data from each solution. In this way, the DMO has compiled five primary themes which encompass the impact of smart solutions which will be discussed in the following section.

3.2.2 Perceived Impact

Information gleaned from the managers of Smart Destination initiatives in Spain reveal a perceived positive impact on governance and sustainability in the destination of their jurisdiction, with room for improvement (Ivars-Baidal et al., 2023). This is particularly in reference to energy efficiency and sustainable mobility, but does not include protections of biodiversity, urban ecosystems, and reduction of noise pollution, of which no positive impact was indicated.

- Governance and environmental sustainability: energy efficiency, sustainable mobility; no perceived benefit to biodiversity, urban ecosystems, or noise pollution.

- Economic: innovation, improvement of the city's image, increased competitiveness of urban centres (but not destinations).

- Social sustainability: accessibility for people with disabilities, perceived greater social inclusion; no clear reduction in overtourism.

There is a clear bias towards urban centres in developing smart initiatives (Ivars-Baidal et al., 2023). This is due to increased resources and funding in urban centres, as well as greater pressure on existing infrastructure towards development solutions. There is also a noticeable preclusion between Smart City and Smart Destination approaches in which is seen a distinction. This means that a pursuit of Smart City policy does not naturally lead to the development of the locale into a Smart Destination, but rather that in order to develop an existing locale into a Smart Tourism Destination, a standalone, focussed strategy on that particular goal needs to be implemented. Smart City and Smart Destination strategies are distinct from one another.

It has been ascertained that locals and tourists are perceived as users and beneficiaries of the smart initiatives, "but their role seems to be limited to the generation of data that feeds the system" (Femenia-Serra et al., 2018). It should be noted, however, that the use of data even in the Spanish urban centres is relatively low.

In Benidorm specifically, five dominant themes encompassing the impact of the smart solution strategies have arisen and are as follows:

1. Data-driven Knowledge: This is a deeper and more profound understanding of tourist's needs, wants, and behaviour as facilitated by the use of smart solutions, particularly WiFi and social media. In analysing data imparted by such tools, the DMO is able to know more information about the tourist than before, such as their social demographic, what they say on social media, where they come from, how they reach Benidorm, their spending behaviour, as well as the tourist's feelings and perceptions as gleaned through ratings and opinions from social media. These are all able to be quantified and presents a cornucopia of information to DMO. The data is further enriched by hired companies' obligation to provide the DMO with any and all data gleaned through their operations. This has provided the DMO with "public access and control of data" (Femenia-Serra & Ivars-Baidal, 2018).

2. Data-driven Marketing and Decision Making: In understanding the tourist better, decisions surrounding marketing practice can be made targeted more efficient (Aguirre et al.,

2022). Rather than using a wholesale marketing stratagem across all online channels, Visit Benidorm formulates independent yet related strategies for each channel informed by analytics derived from that channel in order to more effectively target the channel's user-base. Aspects such as the languages in which posts about Benidorm are made indicate the nationalities of prevalent tourists, and data on competing destinations' social media presence and activity can inform decisions on strategic, competitive action.

3. Internal Coordination and Leadership: Here, the importance of a long-term, goal-oriented strategy for the destination's development is underlined as streamlining the processes by which smart solutions are utilised. There is also a holistic, encompassing attitude made possible by the DMO in its involvement with all the various independent actors related to the tourism industry in Benidorm, which is naturally a significant number considering the broad nature of tourism-related products and services. As such, communication between areas of the city council has seen improvement, as has the interchange of ideas (Aguirre et al., 2022). This, of course, requires a harmonious and likeminded relationship between the tourism sector and the City Council, with neither undermining the other, which in and of itself constitutes challenges that the DMO must continuously be mindful to mitigate and, when they arise, overcome. Due to Benidorm's nature as an existing tourism destination, a relationship of co-dependence was already established before the introduction of any Smart Destination strategy. It may be noted that in an up-and-coming tourism destination, this coexistence of DMO and City Council will likely require particular care in the development process.

4. Public-private Partnership and Innovativeness: Private enterprise plays a key role in the vision of Visit Benidorm as a Smart Destination, and a clear emphasis is made on the pursuit of a collaborative and mutually beneficial relationship between private and public operations (Visit Benidorm, 2023). The local tourist board is noted as being made up of a high percentage of private companies, with hoteliers particularly emphasised as comprising a significant portion of the tourism industry's private sector (Aguirre et al., 2022). There is an impression of Benidorm as being the venture capitalist's paradise, abound with free data waiting to be harvested, for the purposes of insidious marketing ploys and liberal profiteering. The destination is even described as "a lab for start-ups and innovative companies that want to test their technology in the destination", with project leaders assuming the potential risks involved (Femenia-Serra & Ivars-Baidal, 2018). For better or worse, this has ensured that free, ubiquitous public WiFi has been established at zero

cost to the tourist board and City Council by a private telecom company in exchange for advertisement, as has occurred with the implementation of beacon technology.

5. Destination Image and Certification: Benidorm's pursuit of smart solutions in its development towards becoming Spain's first officially certified Smart Tourist Destination in line with the Spanish standardisation agency AENOR has influenced its image abroad as irrevocably tech-focussed (AENOR, 2023). This has and will continue to position Benidorm internationally as a destination at the cutting edge of technological development in the tourism sector and will serve as a benchmark for other like-minded DMOs and administrative bodies to seek to emulate.

These factors, all technology-related, have undoubtedly contributed greatly to Benidorm's goal of becoming an officially Smart Destination. The use of ICTs and smart solutions has contributed to Benidorm's performance, management infrastructure and competence, and marketing ability (Benidorm, 2023).

However, the tourist experiences of these smart solutions differ greatly from the managerial perspective (Aguirre et al., 2022). The negative impacts outweigh the positives. The only real positive is the free WiFi prescient throughout the destination. Otherwise, other positives are noted as platforms such as Google Maps and TripAdvisor, all of which exist outside of Benidorm's influence and are unrelated to the DMO's targeted efforts.

Many of the tourists surveyed in the study were unaware of utilities such as beacons, QR codes, and the gaming app as there was no clear advertising of them nor did the tourist feel any need to seek any such utilities. It is noted that some informants found Benidorm's smart solutions "unnecessary" and even "redundant" (Femenia-Serra & Ivars-Baidal, 2018). Many informants expressed a desire to "disconnect from any technology" altogether upon arriving at their holiday due to the existing pressures of technology use in their daily lives and careers, with one informant claiming, "When I arrive at my destination, I just want to disconnect from everything. The less the better. I leave my smartphone in my room." (Femenia-Serra & Ivars-Baidal, 2018).

Most prescient are concerns over privacy. The management and use of tourists' personal data without their consent incited "privacy and security concerns" which influenced and even inhibited their utilisation of technology and smart solutions both on holiday and at home (Femenia-Serra & Ivars-Baidal, 2018). Invasive marketing driven by data sharing is a pressing

concern for many tourists and causes reluctance to engage with any personalised services and information (Aguirre et al., 2022).

Other negatives of Benidorm's smart solutions are manifold, with the predominate aspects of privacy, limited or no interaction with other human beings, an overload of information, and dependence on technologies, to name a few (Femenia-Serra & Ivars-Baidal, 2018). Literary findings make clear that tourists feel that technology makes them less spontaneous, less social, more dependent, unable to disconnect, and unable to control the use of their personal information. Rather than alleviating burdens of overtourism, the prevalence of online reviews drives tourists to certain places, which only increases the pressure on certain sites, and the ubiquitous nature of navigation tools decreases the tourists' sense of discovery and exploration.

Some positives perceived by tourists were information available from Visit Benidorm's presence on social media, such as the weather, events, and the opening of new establishments, and information on Visit Benidorm's website, like points of interest.

To summarise the study on Benidorm, it is apparent that the DMO, local tourist board, and numerous private companies all cooperate in a symbiotic, profiteering partnership to harvest and process data of a largely inconvenienced (and even unwilling) tourist population. What the study terms "smart solutions" are not at the behest of the populace it claims to serve, but rather take advantage of that populace to increase the public-private administration's competitive edge against other sun and sand destinations in Spain.

Benidorm serves as an illustrative example of one way in which the use of ICTs and smart solutions in the name of destination development can be misappropriated largely to its own detriment and that of its visitors. Smart solutions are nothing more than addressing the problem of increasing competitiveness and revenue accumulation. They are not solutions to any problems faced by the tourist, though they may be presented as such.

3.3 Informed Limitations of the Smart Destination Concept

There are some limitations which appear repeatedly in studies and literature on the impact of the Smart Destination Model. These are predominately the unbalanced emphasis on technology and the issues that come along with it, the complexity of the Model in practice, and its inherent urban

bias. It may also be noted that Smart Destination initiatives in Europe, as evidenced by those in Spain and Italy, rely heavily on funding from European Union initiatives (Vanolo, 2013; Ivars-Baidal et al., 2023). By understanding these limitations, any future applicability to Kainuu can avoid repeating past mistakes of other destinations and approach the Model with those limitations in mind.

3.3.1 Limitations and Threats of Technology

The dominance of the third pillar of the Model, that of Technology, has been criticised as far outshining the other pillars, often to their detriment (Ivars-Baidal et al., 2023). This has led some critics to describe the Smart City as an "urban imaginary which combines the green city with technological futurism to offer a technocentric view of the city of the future" (Vanolo, 2013), and thus one that paves the way for neoliberal policies favouring large technological companies. It has also been noted that the use of technology cannot, by nature, be considered ideologically neutral, and that the precursor of the Smart Destination strategy – the Smart City – is corporate by design (Halegoua, 2020). Some critics have even gone so far as to state that the Smart City project is nothing more than "a technology diffusion challenge operating in a dynamic and contested space between the public and private sector." (Clark, 2020).

It is prescient to note that in the case of Benidorm as explored in the previous section, the Smart Destination Model discussed in section 3.1 of this paper was not used, but the explicit goals of "governance, sustainability, innovation, connectivity, and information systems" were outlined (see Figure 2 above) (Femenia-Serra & Ivars-Baidal, 2018). The study on the effectiveness of Benidorm's pursuit of smart solutions was primary focussed on the relationship between private and public partnerships with seemingly zero interest or incentive to limit technocratic expansionism in the city and its environs. Though the key term "sustainability" was explicitly noted in the model used to guide Benidorm's development of smart solutions, there was no follow-up discussion on what sustainability meant, how it could be implemented, and to what effect, rather the focus was entirely upon ICTs and smart solutions to increase data harvesting capabilities.

As well as in the study on Benidorm, other studies of surveyed tourists in the UK and Spain have shown that privacy and data protection is a growing concern, where tourists have been seen to adopt strategies in an effort to protect their data (Femenia-Serra et al., 2021). In this way, it is

evident that privacy concerns influence tourist behaviour when interacting with Smart Destination technologies. Privacy, surveillance, and social justice issues are all doggedly present in the usage of technology, particularly when embedded into the very infrastructure of the smart locale, that has garnered real criticism from scholars and citizens alike (Halegoua, 2020).

By focussing only on the Model's pillar of Technology, there is a real risk of minimising and even threatening social interactions and relationships in favour of corporatisation, privatisation, and increasing competitiveness, in the narrow pursuit of economic gain (Hollands, 2008). Relying on private technological corporations to fuel the drive towards becoming a Smart Destination carries with it the inherent risk of partiality. Hollands posits the questions, "What happens to 'balance' with the smart growth agenda, for instance, when community interests are superseded by developer's interests, or the requirements of capital accumulation do not easily square with environmental and social sustainability?" (Hollands, 2008).

The established Smart City approach to urban development provides examples of the weaknesses in poor administrative practice. The trend towards neoliberalist ideology in privatisation, devolution, and deregulation in favour of the economic growth of technological companies embedding themselves into the infrastructure of the Smart City has been a constant threat throughout the Smart City policy's realisation (Clark, 2020). Ride-hailing and food delivery services can be seen as an example of this – in other words, the increased precarity of employment, casualisation of the workplace, and labour flexibility at the cost of the employee's security, rights, and welfare.

There are also risks inherent to a reliance on technology. These are including, but not limited to, the unpredictability of investment, technological out-datedness and obsolescence, limitations incurred by legal requirements, and a difficulty to plan in the long term (Femenia-Serra & Ivars-Baidal, 2018).

However, these pressing concerns about technology in the physical environ are not an inherent factor of its use and can be mitigated in favour of a "socially just" Smart Destination (Halegoua, 2020). The issues that have arisen from the development of urban Smart Cities do not need to carry over into the development of Smart Tourist Destinations. It may be argued that the fixation on the third pillar of Technology to the detriment of the other pillars in the Model is a failure of administration rather than a flaw in the Model itself.

The importance of a close relationship of communication and mutual understanding between the administrative body driving the Smart Destination strategy and the locale it oversees cannot be

overstated, as understanding the balance between population and place will ensure that technology remains a means to an end, rather than an end in and of itself, and continues to be employed and utilised in service of the people and never vice versa. The role of communication between populace and governance has been put forward as facilitating this understanding.

3.3.2 Vagueness of "Smart"

The term "smart" is often nothing more than an empty buzzword with the purpose of invoking some kind of exciting futurist bias in the reader. There is no concrete, internationally recognised standard which constitutes "smartness", therefore there is no quantifying what makes a destination smart or not. Here, a theoretically sound and measured framework to realise "smartness" ought to be constantly referenced by the administrative body in charge of its implementation.

More than a buzzword, project managers should conceptualise and understand what it means to be a Smart Destination in theory and practice. A criterion needs to be accepted and adhered to in order to realise what it means to be a Smart Destination and to understand why it is important to become one (Halegoua, 2020). In this vein, the understanding and utilisation of the Smart Destination Model and all of its pillars is key in development.

The case of Benidorm as discussed in section 3.2 above provides an example of how the term "smartness" can be applied to any destination making use of technology, regardless of any other metrics of the destination's development. This is at odds with the Smart Destination Model explored in section 3.1, of which technology is only one of five pillars. This indicates that the label of "smart" does not necessarily indicate any measured interest in accessibility and sustainability development, only a vague self-congratulatory pursuit of technological "solutions" to problems which may or may not exist in reality.

3.3.3 Complexity of Implementation

A prominent limitation of the Model is also its complexity, particularly in implementing its ideology in practice, due to the necessarily large number of stakeholders and participant parties involved at various levels of development (Ivars-Baidal et al., 2023). This has led researchers to

postulate that a DMO or similar guiding administrative body is an absolute requirement to develop a destination into a Smart Destination, with one study even emphasising that the presence of a DMO is “critical” (Femenia-Serra & Ivars-Baidal, 2018). The success of a destination and the success of a DMO have been shown to be implicitly linked, with an emphasis on sustainability and holistic development at the core of a DMO’s operation (Ritchie et al., 2009).

This means that smaller destinations, up-and-coming destinations, or destinations without a DMO or management body will assuredly struggle to pursue the Smart Destination Model, and may even be led astray by invasive private tech companies seeking to profiteer from an unmoored, wayward desire to become “smart” (though it may be noted that, as in the case of Benidorm discussed in section 3.2 above, this can still be the case in collaboration with a DMO).

3.3.4 Urban Bias

It has been argued that an urban bias lends particularly well to the Smart Destination strategy due to its being an offshoot of the initial Smart City concept (Femenia-Serra & Ivars-Baidal, 2018). This can be seen in the case study of Spain as discussed above, wherein an urban bias in the national strategy towards the development of Smart Destinations was clearly observed (Ivars-Baidal et al., 2023). This is the result of an ability to formulate more advanced plans to garner greater amount of public funding.

However, that does not mandate that urban bias is inherent to the Smart Destination Model. It is merely that urban centres have more personnel, more resources, and more influence due to a greater population, leading to a skew in bias that can be avoided or overcome by properly adhering to the first pillar of the Smart Destination Model: that of Governance (discussed in section 3.1). Adequate, mindful, and effective governance of a tourist destination will consider the holistic development of a destination, rather than a single urban centre to the detriment of smaller centres on the periphery.

4 Destination Management Organisations and Corporations

The theory discussed above has indicated plainly that a DMO or DMC is necessary in the implementation of the Smart Destination Model and the guided development of a tourist destination into a Smart Destination. In order to understand the implications of this conclusion, this section will briefly explore the definitions of DMOs and DMCs, what they are, what role they play in the tourism industry, and what differentiates them. A theoretical understanding of such questions is required in order to project the determining factors of successful DMOs. In utilising that theoretical understanding alongside a practical context of timing and locational determinates, one can gauge how a DMO might operate in the target locale (in this instance, Kainuu).

While the initial subsections are concerned primarily with basic theoretical questions surrounding the DMO as a concept, the latter subsection will provide a practical example of a DMO currently in operation in Finland from which a demonstration of functionality can be obtained.

4.1 Definitions, Differences, and Function

The initialism of “DMC” stands for Destination Management Corporation, whereas “DMO” stands for Destination Management Organisation. In this instance, the difference between the two indicates ownership: being an established corporation, DMCs are privately owned whereas DMOs usually have local, regional, or national governments as their primary stakeholders, or are a mix of the private and public sector (Fayos-Solà et al., 2012). This study will utilise the general term “DMO” to refer to both for simplicity’s sake.

A tourism destination can be understood to be a physical location, irrespective of political or administrative bounds, comprising various interconnected products relating to the tourism industry (such as accommodation, product services, and food and beverage services) which a visitor can enjoy as part of a congruent tourist experience (UNWTO: UN World Tourism Organisation, 2019).

A DMO is defined by the United Nations World Tourism Organisation (UNWTO) as a management organisation responsible for coordination all of the congruent factors that comprise a tourist destination (UNWTO: World Tourism Organisation, 2019).

The area under a single DMO's purview can be as large as an international region comprising multiple countries with a uniting theme, such as Visit Arctic Europe (Visit Arctic Europe). They can comprise an entire country, such as Visit Finland (Visit Finland, 2023); a small town, such as Vuokatin Matkailukeskus Oy (Vuokatti.fi, 2023); or anything in between.

The following subsection will explain in detail the function and purpose of a DMO, providing information as to the benefits a DMO provides to the destination of its operation.

4.2 The Purpose of a DMO

The purpose of a DMO can be broken down into predominate points that this section will discuss at length (Ritchie et al., 2009):

- Marketing.
- Industry cohesion and coordination.
- Sustainability.

DMOs exist to provide a cohesive and holistic representation of the tourism sector of a specific area. It is for this reason that DMOs are frequently mistaken to initialise Destination *Marketing* Organisation, as it is the DMO's role to foster a brand or image of the destination within their purview; however, marketing is not the only function of a DMO. They also strive to create a diverse and inclusive platform that combines companies that would otherwise be competitors to strengthen the entire region's tourism market and encourage the region's sustainability and competitiveness (Pike, 2008). One could argue that a DMO or DMC is imperative to a destination's growth in the current global climate.

The central purpose of a DMO or DMC is to increase competitiveness of a destination in relation to other, similar destinations with which the target shares similarities from the perspective of particular target segments (Pike, 2008). Aspects of competitiveness may be price, distance, accessibility, available program services, accommodation options, level and quality of food and beverage services, cohesion of the tourism sector with local society, the environment, and others. Due to the sheer scope of what destination competitiveness entails, having one organisation or

corporation that works to manage each of these aspects and create a cohesive and holistic representation of the destination can provide unprecedented benefit to the growth and sustainability of the destination in question.

The UN World Tourism Organisation explicitly emphasises that a DMO's function is "responsible" and "sustainable" destination management (UNWTO: World Tourism Organisation, 2019). This can be understood to mean both environmentally and economically sustainable. The process of management is described as "effectively" and "harmoniously" addressing the service chain and all parties involved in it, namely "visitors, the industry that serves them, the community that hosts them, and the environment". The use of the term "environment" here is explicitly referencing both natural and cultural resources.

Some of the differing ways that a DMO or DMC can benefit a previously undeveloped destination are (Ritchie et al., 2009):

- Outlining the concrete objectives of the destination; what the tourism industry in the area is aiming to achieve and what policies it can establish in order to achieve those objectives. Through these objectives, a framework for targeted development can be established to ensure the measured and diverse improvement of various aspects of the destination and the impartial management of its progress.

- Creating a cohesive brand or image of the destination that can be utilised in effective marketing of the destination to international visitors. In this way, the destination can be more easily recognised and understood by prospective visitors and more effective marketing strategies can be employed for the promotion of the destination.

- Clearly identifying the natural and man-made pulling factors of the destination and creating profiles for those pulling factors and managing them effectively to ensure that their promotion is sustainable well into the future.

- Being a single, large entity with marketing and booking resources through which the multitude of small and micro companies in a region can be represented. This ensures the sustainable growth of existing companies that may otherwise struggle to sell their products to customers independently and provides a measure of safety for new tourism-related companies starting up in the region.

- Being a single body that is able to collect and monitor data relating to tourism in a region in order to effectively premediate planned approaches to different strategies of growth in the future. Through the analysis of existing data, the DMO is able to manage different aspects and areas of improvement to ensure the continued progress of a region as a competitive tourism destination.

- Managing the growth and availability of different aspects of the tourism sector in cohesion with one another: program services, transportation and charter services, accommodation services, and food and beverage services; and also, how each of these sub-sectors relate to tourism marketing, promotion, advertising, and their distribution channels.

The realisation of all of the aforementioned points will serve to greatly improve the current tourism situation in the region of operation. It is also important to work closely with the existing entrepreneurs in the region in order to create concrete objectives and policies that truly represent the direction the locals of the regions wish to go.

4.3 How The Purpose is Achieved

The aforementioned functions of DMOs are achieved predominately through a method of strategic cohesion. This means that rather than directly controlling the activities of the industry it oversees, it brings together the various disparate companies who may otherwise be isolated and even in competition with one another, with the aim of fulfilling a common goal – that is, to solidify the image of the destination as a whole and incite more customers to visit (UNWTO: World Tourism Organisation, 2019).

To provide a concrete example, a town may have multiple activity service operators in the area all in competition with one another, as well as accommodation services and disparate food and beverage services, information for which the customer must search independently in order to book their holiday. A DMO operating for the town, representing the tourism sector as an industry in demand of all the activities of these separate companies, would bring them together to create a cohesive tourist destination. This frequently also manifests in a single information and/or booking platform that the potential customer can utilise in booking their own holiday, which removes the onus from the customer to seek out information independently.

Here, it is important to understand the holiday booking process and the motivations of the customer in deciding on a destination of choice. In deciding a holiday destination, each potential customer has an ideal destination in mind which they seek to match to an existing destination (Goodall & Ashworth, 1988). This is then highly dependent on the information available to the customer. Information is gleaned predominately through formal sources, such as the internet, or through informal sources, such as word-of-mouth. If information is difficult to find or requires extensive searching, documentation, and comparison, this sets up a barrier between the customer and the holiday that will inevitably divert many potential customers to destinations which do not face such barriers. It therefore follows that a destination with an effective DMO which operates in accord with the functional definition discussed above will be more likely to garner customer attraction and resolution.

4.4 Practical Example: Existing Regional DMOs in Finland

There are many DMOs and DMCs operating at various levels throughout Finland, however for the purposes of this study, an analysis and comparison will be made with two regional DMOs whose work is concentrated upon their corresponding administrative region.

Existing DMOs and DMCs can be analysed in order to understand what constitutes the successful management of a destination and what aspects ought to be replicated in a DMC for Kainuu. Information found about real DMOs and DMCs can be related to the theory presented in the first part of the thesis as demonstrable evidence of otherwise hypothetical success.

House of Lapland is a publicly-owned DMC which serves the entire region of Lapland (House of Lapland, ei pvm). It manages official marketing and communications about Lapland, encompassing not only the tourism sector but also living in Lapland, business, culture, and ultimately all facets of human interaction with the region. As tourism makes up a large portion of Lapland's regional economy, it is therefore natural that House of Lapland's tourism operations is significant.

Their website not only provides a plethora of logistical information for the tourist – accommodations, program services, transportation, food and beverage services, as well as example holiday itineraries – but the image and emphasis of Lapland as an ecologically-conscious and environmentally sustainable destination are also made clear (House of Lapland, 2023).

An interactive, social media element is demonstrated on the website with links to various popular platforms such as Facebook, Instagram, Twitter, and YouTube through which tourists can independently and self-sufficiently promote Lapland as a tourist destination to their peers. The DMC's marketing activities also feature Instagram-specific campaigns to engage with tourists and invite them to advertise Lapland on Instagram on the DMC's behalf.

Lapland could be positioned to pursue a Smart Destination strategy with its existing fundamentals in place. Its comparatively strong DMC with operations throughout a vast swathe of sectors in Lapland positions it favourably in relation to the Smart Destination Model's first pillar of Governance. Sustainability is already a priority for Lapland, as evidenced in their marketing and management initiatives, but there is room for improvement in regard to accessibility as the website has no clear accessible functionality.

5 The Kainuu Context – Practical Implication of the Smart Destination Model

At the time of writing, there are several DMOs operating within Kainuu such as Kainuun Liitto, Wild Taiga, Arctic Lakeland, and Vuokatti (Svenja, 2019). The national Visit Finland DMO for the entire country operates within Kainuu, which falls under their "Lakeland" district brand. It may be noted, however, that this brand comprises the largest swathe of the country, consisting of ten regions and including such prominent destinations as Lake Saimaa, Koli, Tampere, Hiidenportti, Kuopio, Joensuu, Karelia, Savo, and more; with Kainuu making up only the northernmost reaches (VisitFinland.com, 2023).

Many destinations within Lakeland operate under their own local DMOs, with Visit Finland serving as the parent DMO in something of a supportive relationship.

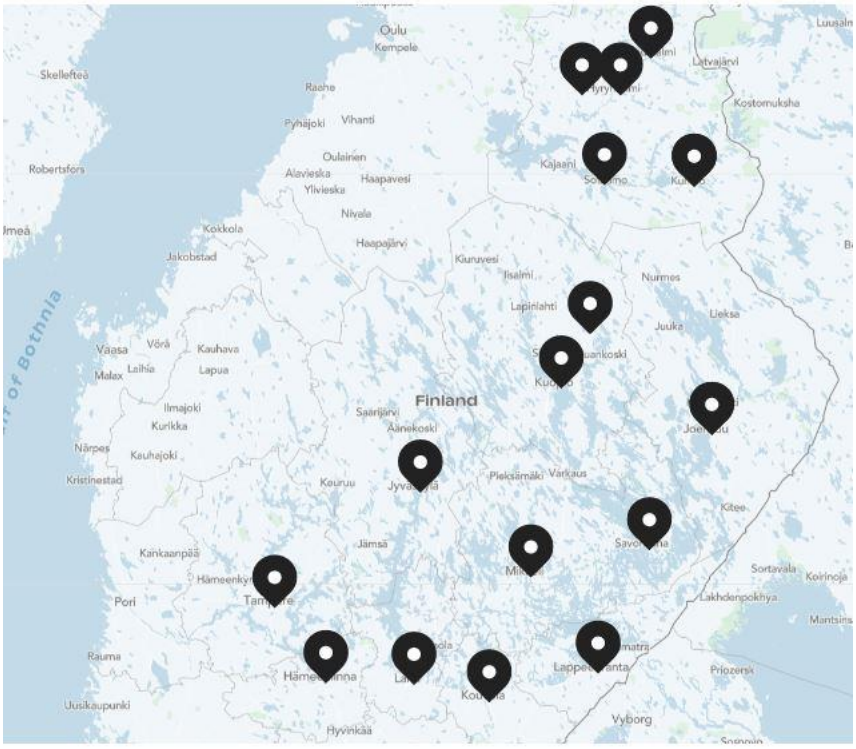

Image 2: Destinations in Finnish Lakeland according to Visit Finland (VisitFinland.com, 2023).

Of the destinations in the above image, five are located within the Kainuu region, these being Vuokatti, Kuhmo, Paljakka, Ukkohalla, and Suomussalmi. Due to the extremely broad and diverse area that is Lakeland, less-known destinations in Kainuu are notably lacking, such as Kajaani, Oulujärvi, Ärjänsaari, Manamansalo, Puolanka, Paltamo, and a plethora of lesser-known but by

no means less viable destinations. One may argue that it is precisely because of Visit Finland's homogenous jurisdiction that such smaller destinations remain relatively unknown.

The subheadings of this section will comprise the practical feasibility study with a contextualised analysis and projection of the five pillars of the Smart Destination Model outlined in section 3.1.1. The first pillar of Governance will be explored – what the administrative situation is in Kainuu at the time of writing, the benefits and limitations of the situation, areas of improvement, and what needs to be done to create a solid foundation upon which to build up Kainuu as a Smart Destination.

The concept of Innovation, comprising the second pillar, and its potential in Kainuu will be discussed in reference to entrepreneurial innovation, areas of growth, areas of as-yet untapped potential informed by the theoretical background and case studies in Spain and Benidorm, and the threats and limitations both facing innovation and implied by it.

The third pillar of Technology will be applied to the Kainuu context with a description of existing technological applications already in existence in Kainuu, as well as areas of improvement again informed by the information laid out in the former half of this paper. A particular focus will be given to the limitations, threats, and potential misuse of technology, informed by section 3.3.1, and a holistic, positive alternative provided for the benefit of Kainuu as a tourist destination.

Accessibility, the fourth pillar, will be discussed at length in a practical context – what it means, how it looks in the physical and digital environment, and the presence and removal of attitudinal barriers. Examples of successful development of accessibility will be provided to guide future Kainuu-based efforts in the pursuit of achieving accessibility and removing barriers.

The final pillar of sustainability, in application to economic, environmental, and socio-cultural sustainability, will be explored as it exists in Kainuu already and how Kainuu can develop this pursuit using effective examples and benchmarks for progress from both within Finland and in the greater international sphere.

By evaluating these five pillars, a conclusion will be drawn as to the situation in Kainuu currently, if Kainuu is in the position to pursue a Smart Tourist Destination strategy, how it can improve its position, and whether becoming a Smart Destination is within Kainuu's economic, environmental, and socio-cultural interests.

5.1 Governance: Destination Management, Prospective Partners, and Competitors

The evidence that a methodological approach to tourism promotion can greatly enhance the competitiveness of any destination is well established, as a planned tourism strategy can ensure the continued viability of a destination well into the future (World Tourism Organisation, 1994). Sections 3 and 4 of this report have discussed the importance of Governance and what it means both to the governed and to those involved in administration. Particularly in the implementation of the Smart Destination Model and development of a destination into a Smart Destination, the role of governance is arguably imperative.

At the time of writing, the closest entity to a DMO in Kainuu is Kainuun Liitto, which is best positioned to serve at the administrative authority of a fixed Smart Destination strategy (Kainuun Liitto, 2023). Partner to the European Union's Smart Specialisation Strategy for "research and innovation-driven growth", the pursuit of "smartness" is already present in Kainuun Liitto's operations (though it ought to be noted that this is not a tourism-focussed strategy; see section 5.1.1 for further discussion) (European Commission, 2023). The company already has established ties and partnerships with a wide variety of regional companies across multiple sectors and has an ongoing "*Älykkään erikoistumisen strategia*" or Smart Specialisation Strategy from 2021-2027 (Kainuun Liitto, 2020).

5.1.1 Smart Specialisation Strategy for Kainuu 2021-2027 (original Finnish: *Kainuun älykkään erikoistumisen strategia 2021-2027*)

This strategy, which is part of the European Union's Smart Specialisation Strategy's Research and Innovation branch (see section 5.2 for more information), is a multi-sector initiative to increase the region's research, development, and innovation capabilities through the collaboration of private and public actors, overseen locally by Kainuun Liitto (Kainuun Liitto, 2020). Kainuu is noted in the strategy as being in particular need of "smart" development due to the lack of expertise as well as related academic and research organisations, however the potential is notably present and its pursuit is aimed to encourage and contribute to the growth of the entire country.

It is important to note that this strategy is not a tourism strategy but rather an economic developmental tool with a focus on the regional economy, this being comprised primarily of heavy industry and the service industry. Specific sectors are noted as: bioeconomy, mining, metal and

technological industries, and the service industry. A significant portion of the strategy is devoted to digitalisation and what it calls the “Green Deal”, which may be understood to be environmentally-conscious decision-making such as energy production and consumption, recycling and environmentally sustainable production, sustainable and localised food production, measures to mitigate climate impact, and both the preservation of and return to ecological biodiversity (Kainuun Liitto, 2020.)

This strategy, while not tourism-focussed, is nevertheless an effective indicator of Kainuun Liitto’s administrative competence and the trust allocated among regional and parallel operators. It also demonstrates the local awareness of “smartness” and a trend towards digitisation. In particular, the section on digitisation, while primarily concentrated on its use in the heavy industry sector, addresses “smart solutions” such as Big Data analytics, automation, and high-performance computing (Kainuun Liitto, 2020).

The guiding principles of this strategy differ significantly from the Smart Destination Model, with only four guiding steps being listed as:

1. Governance: this being a collaborative, coordinative group of multiple actors.

2. Entrepreneurial innovation and solutions: related specifically to the EU Smart Specialisation Strategy steps (see section 5.2).

3. Funding and financial advice: as provided by the EU through the Smart Specialisation Strategy.

4. Technical and logistical support: also provided by the EU via the Smart Specialisation support network.

Due to its innate connection with the EU Smart Specialisation Strategy and the broad nature of the developmental aims affecting the wider economic landscape, this can be understood to be ineffective for the tourism industry specifically which would benefit much more from a singular, targeted development project.

Though Kainuun Liitto’s role as a holistic regional management body is evident, the development of Kainuu’s tourism sector alone demands more targeted, focussed administration with the Smart Destination Model at its core. This means that either a branch of Kainuun Liitto ought to be formed with this goal in mind, or an entirely novel institution, organisation, or company such as

a DMO or DMC be formulated specifically to represent, manage, and guide Kainuu as a tourist destination.

5.1.2 Existing DMOs in Kainuu

Other than Kainuun Liitto, other DMOs may be considered to exert some measure of authority in terms of the governance of the region's tourism ventures. These are Wild Taiga, whose activities focus upon the municipalities of Suomussalmi and Kuhmo; Arctic Lakeland, a branch of Visit Finland and Kainuun Liitto; and Vuokatti, centred solely upon the ski destination from which it takes its name (Wild Taiga, 2023; Arctic Lakeland, 2023; Vuokatti, 2023). All of these companies are limited in their area of operation, however, and therefore neither is in a position to exercise any kind of administrative influence in the region beyond a partnership of mutual interest.

Due to the disparate nature of DMOs and tourism-focussed companies in Kainuu, the lack of administrative coordination is apparent and would need to be addressed in the pursuit of a Smart Destination strategy.

5.2 Innovation – Entrepreneurship and Academia in Kainuu

Innovation is already something of a priority in Kainuu among the economic and public academic sectors, as evidenced by Kainuun Liitto's Smart Specialisation Strategy as discussed above in section 5.1.1, and the involvement of European Union-backed initiatives such as the ongoing S3 strategy from which Kainuun Liitto's is an offshoot beneficiary.

There is significant potential for innovation in Kainuu from its academic institutions, these being primarily Kajaani University of Applied Sciences, Kainuu Vocational College, and Vuokatti Sports Institute, among others. Due to the involvement of academia and the private sector in existing projects, workplace internships, and other such cooperations, the spirit of entrepreneurship is rich and accommodating.

The European Commission's Smart Specialisation Strategy, otherwise known as S3, is a designed and incentivised collaboration between state and corporate entities in the interest of furthering free-market capitalist objectives (European Commission, 2023). Using terms such as "innovation"

and “entrepreneurialism”, this strategy seeks to address and overcome localised social, environmental, and urban challenges by subsidising venture capitalist endeavours, particularly (but not exclusively) in the technology field.

The two main priorities of the strategy as described on the European Commission official platform are:

1. The utilisation of “entrepreneurial knowledge” in a particular region or state within the EU and taking an “entrepreneurial approach” to perceived opportunities in the market, increasing competition and competitiveness of a corporate nature, collaborating, and forming partnerships in order to access and utilise resources, and the taking and managing of corporate risks. This specifically involves the ever-deepening mergence of the public and private sectors, including academia, venture capitalists, public agencies, businesses, science and business parks, so-called “business angels”, and similar such sectors of society.

2. An objective analysis of the situation in a particular locale, its potential for research, innovation, industry, skills, human capital, and public and private demand for development. The analysis is also to include public and private budgets for development and projected innovation to ensure economic sustainability.

In order to fulfil these priorities effectively, the strategy mandates overarching and far-reaching governance structures operated jointly by multiple cross-sector actors. The core of the strategy is collaboration, and it therefore rejects any governance by a single authoritative body.

What the strategy terms “innovative support measures” but may better be understood to be subsidised risk management in order to offset market failures, is a key element of the strategy, with the encouragement of “risk-sharing” among multiple stakeholders primarily from the public sector. This includes “pilot interventions” which are intended to be abandoned or modified later.

All of the above information essentially indicates that the S3 strategy subsidises and provides support to private-public collaborative projects with the central goal of developing innovative, entrepreneurial solutions to perceived societal challenges.

5.3 Technology and ICTs

Existing technologies related to tourism are currently limited and the challenges posed by the vastness of Kainuu region as a destination are prescient, but in considering the theoretical background and case studies in the former half of this paper, this may be considered something of a blessing in disguise. The limitations of Kainuu's technological infrastructure are also its strengths. As seen in the case of Benidorm as discussed in section 3.2, tourists in the sea and sand destination of Benidorm largely found what the industry calls "smart solutions" to be unnecessary at best, and intrusive to the point of inhibiting their use at worst. The threats of technological expansion as discussed in section 3.3.1 are also implicitly present when considering what kind of "smart" environment Kainuu should pursue.

From the theoretical discussion throughout this paper, it is clear that regulation on technological expansion and the pursuit of "smartness" is absolutely imperative for the wellbeing of the local economy, residents, and tourists, all of whom ought to be at the heart of smart solutions. Smartness for the sake of smartness only negatively impacts users and may even steer tourists away from destinations (see section 3.3.1). In other instances, such as to travellers with disabilities, information on accessibility as made available via ICTs is shown to increase their rate of visitation and facilitate their decision-making process (Miller, 2014).

Kainuu as a tourist destination is, first and foremost, a nature-based destination (VisitFinland.com, 2023). Foreign tourists come to Finland largely in search of fresh air, wild spaces, and quietude – in other words, an escape from hectic urban life elsewhere (Visit Finland, 2017). The tourist feedback from Benidorm is appropriate to acknowledge here as many were quoted as desiring only to "switch off" once they arrived at their holiday destination (Femenia-Serra & Ivars-Baidal, 2018). Along with the tourist feedback in Benidorm regarding the appropriateness of "smart solutions", one is inclined to ask, a solution to what? What problem exactly are tech companies insisting the smart solution is for? The cynic may posit that the problem is lack of revenue on the tech companies' behalf rather than any problem the tourists face themselves.

While the evidence exists that many tourists use holidays as a "digital detox", studies have indicated that the benefits of disconnecting arise only when it is voluntary (Gössling, 2020). Particularly millennial tourists find the most psychological benefit when making the choice to switch off when the option to reconnect is omnipresent. This indicates that even in pursuing an "unconnected" strategy to alleviate the pressures of modern technology, wellbeing is only experienced

by the tourist if the digital infrastructure exists. Though counterintuitive at first glance, in striving for a wholesome, back-to-nature experience for the tourist by facilitating and encouraging their temporary disconnection from ICTs whilst on holiday, ICT infrastructure must be present and accessible to the tourist at all times, and for the tourist to make the voluntary choice not to engage.

The case study of Benidorm provides an example as to how liberal and unregulated ICTs can infringe negatively upon people's holiday experience. In Kainuu's application of the Smart Destination Model, such errors in governance can be avoided by maintaining administrative control over the use of ICTs and the way they affect both tourists and local residents. Positive use cases of ICTs and smart solutions in their service of real, measured needs are present and ought to be developed with the aim of improving people's lives so as to avoid negatively impacting Kainuu's image as a nature-based destination.

The utility of general, encompassing services such as free WiFi have their benefits, as do specialised digital platforms in service of people's special needs. These may be related to accessibility, as discussed in section 5.4, and sustainability, as discussed in section 5.5. Despite very real drawbacks, ICTs can give Kainuu a competitive edge in particular market segments by meeting their specific needs.

5.4 Accessibility of Physical and Digital Spaces, Removing Attitudinal Barriers

Accessibility is an extremely broad concept that is an issue of growing concern despite its being far from novel, and destinations are inclined to develop physical and digital spaces, as well as professional attitudes, to accommodate all kinds of visitors regardless of ability, age, sex, religion, sexual orientation, gender identity, heritage, and any other kind of demographic differentiation (Renfors & Kokkarinen, 2022). It is particularly relevant to the tourism industry, as studies have shown that information about accessibility is one of the foremost factors that people with disabilities seek to find out in the holiday-booking process (Rucci & Porto, 2022). As the topic of accessibility is the fourth pillar of the Smart Destination Model, it ought to be understood as of equal importance as the oft over-lauded Technology and Governance pillars.

Accessibility can be understood at its heart to be the access of information. The development of accessibility in the tourism sector is significantly linked with technology, as digital platforms and ICTs can benefit both travellers and residents with disabilities of any kind. An example of this may be an officially-recognised platform listing services such as accommodation, food and beverage,

and program services in a particular destination and providing information as to their level of accessibility (Spain is Accessible, 2016).

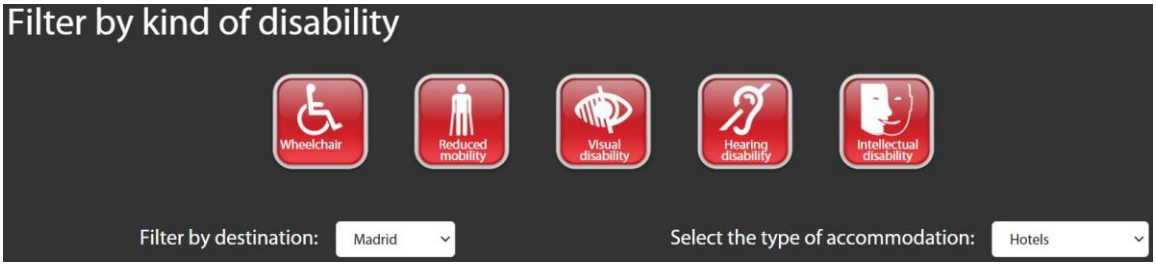

Image 3: The filters available on the Spain is Accessible portal which provide information on levels of accessibility in different sectors (Spain is Accessible, 2016).

By providing clear and barrier-free information digitally during the pre-holiday, on-site, and post-holiday phases, people with disabilities are equitably included in the tourism sector's services. In this way, ICTs and digital platforms can indeed provide smart solutions to remove or transform barriers that prevent access to those with special access needs.

In that Kainuu context, the use of ICTs in serving tourists with disabilities is a significant opportunity. Kainuu is a nature-based destination, as discussed above, as well as being dynamic and highly changeable with the yearly seasonal progression. This means that adequate and up-to-date information for people with disabilities is of great importance, particularly in regard to program services and nature-based activities (Metsähallitus, 2023).

At the time of writing, Metsähallitus maintains fifty-eight accessible nature destinations, of which two are located in Kainuu: these are Hossa National Park and Hepoköngäs Nature Reserve. Due to the seasonality of access opportunities, the use of ICTs to inform tourists as to the condition of such outdoor areas not only provides peace of mind, but also may incentivise tourists to spend their holiday in a destination which facilitates that peace of mind.

Standardisation and the access to information is of critical important to the traveller with disabilities, particularly in regard to nature-based program services (Miller, 2014). ICTs and digital platforms are extremely useful tools in this regard to facilitate the traveller with disabilities' decision-making particularly in the planning phase, which is shown to be of greater importance to the traveller with disabilities than travellers without disabilities.

5.5 Sustainability – Economic, Environmental, and Socio-cultural Sustainability

Sustainability is already at the heart of Finland's overarching tourism strategy and would be the most easily integrated into the Smart Destination Model (VisitFinland.com, 2023). As Finland is a nature-based destination, tourists can be understood to value nature and bear eco-conscious considerations. This means that information about sustainability and sustainable choices could benefit the tourist and aid Finland's image as an ecological destination.

What the Smart Destination Model can bring to Finland, whose emphasis and branding is centred around sustainability, is a holistic and positive integration with ICTs to facilitate the existing sustainability-focussed programs. ICTs here can play a beneficial role in supporting sustainability, as information and communication are imperative in the individual's understanding and pursuit of sustainable choices.

Mobile apps such as the Good Fish Guide (Marine Conservation Society, 2023), which informs users as to the sustainability of their seafood purchases, and NoshPlanet (Lempert, 2016), which provides information on the ethics and sustainable practice of local eateries, give users information and therefore control over making sustainable, ethical purchasing choices. Particularly outside of urban centres, digital apps and platforms can provide information on sustainable practice that tourists and residents alike can utilise. There is market potential in Kainuu, which is prioritising branding factors like "clean food", "farm to table", and locally grown and gathered produce (Kainuun Liitto, 2020). The only way for tourists and residents alike to choose "clean", locally sourced alternatives is by being able to identify and differentiate them from other products.

Information about organisational indicators may be lacking for tourists from outside of northern Europe but may be of interest in their purchasing practice, such as the AvainLippu, Nordic Swan, V-Label, and other such markers of sustainable and ecological operation. Commercialising such knowledge through a local app or online platform may provide significant benefits to an existing eco-minded user base.

6 Conclusion

The Smart Destination Model is a model that can benefit the development of a tourist destination to become more inclusive, more accessible, and more sustainable when implemented in its entirely. However, the equal weight of all five pillars of Governance, Innovation, Technology, Accessibility, and Sustainability is imperative to ensure that development is beneficial to the destination and those who exist there.

The case study of Benidorm provides a key example as to the positives and negatives of pursuing a Smart Destination strategy. On the one hand, the harvesting of data from tourists provides the administrative overseers valuable information in regard to Benidorm's marketing strategy. On the other, privacy and security concerns, coupled with perceived unnecessary or intrusive "smart solutions", negatively impacts tourists and their holiday experience.

Theoretical background and case studies show that the development of ICTs in a destination ought to be regulated, controlled, and directed by a governing body such as a DMO or DMC, in a holistic, guided, and structured development plan to ensure beneficial results for both the destination and the people who interact with it, whether they be residents or tourists (Halegoua, 2020; Vanolo, 2013; Ritchie et al., 2009). Free and open access allocated to tech start-ups and venture capitalists results in a negative impact on the customer base (Femenia-Serra & Ivars-Baidal, 2018).

Kainuu can benefit from controlled development towards becoming a Smart Destination which is entirely feasible, particularly in the fields of accessibility and sustainability. In utilising ICTs and digital platforms to provide information on accessible amenities and program services, as well as local utilities and consumer goods that support sustainable practice, a wider customer base can feel inclined to pursue Kainuu as their holiday destination.

The qualitative research conducted in the former portion of this paper provides adequate and effective examples of the positives and negatives of the Smart Destination Model and the Smart Tourist Destination strategy. Kainuu is established as a feasible location for the implementation of the Smart Destination Model, however with informed caveats.

The research gleaned and conclusions provided in this paper can serve as a foundational base upon which further development can grow, particularly in informing the risks and benefits inherent to ICTs and smart solutions. Suggestions for further research are on the use of ICTs related to accessibility and sustainability in tourism – their mode of operation, successes and limitations,

and local applicability. An on-site survey of the population as to their needs and wants relating to accessibility in the tourism sector may glean fortuitous insight into market niches as yet unexploited, and provide direction to a Smart Destination strategy pursuit.

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