

Why are smart destinations not all technology-oriented? Examining the development of smart tourism initiatives based on path dependence

Abstract

Destination practitioners and scholars have recognised the increasing importance of technologies, resulting in the implementation of smart tourism initiatives to overcome destination challenges before and during the COVID-19 pandemic period. While smart destinations are predominantly deemed to be technology-oriented, there have been calls for more collaborative and human-oriented forms of tourism development. This paper adopts a path dependence approach to explore the development of smart destinations and specifically why some smart destinations do not follow a technology path. The data were collected through semi-structured interviews with stakeholders involved in smart initiatives in Ljubljana, Slovenia. The findings illustrated that smart development draws on resources and activities associated with the past, which was confirmed by identifying the constitutive features of the path. Ljubljana's sustainability path significantly influenced its smart development, which challenges the underlying predominant assumption of smart being equated with digitisation. Developers can use the findings to hasten the implementation of smart initiatives while also being mindful that paths can restrict practitioners' ability to change the focus of smart developments.

Keywords: path constitution analysis; path dependence; smart destination; smart tourism; tourism development

1. Introduction

The rapid development and implementation of technologies has led to the formation of smart tourism and city developments. Technologies are therefore deemed to be central for smart development (Jovicic, 2019). With the increase in smart destination developments, scholars have warned practitioners to gravitate to more human-oriented forms of smart tourism (Kitchin et al., 2019). Hollands (2015) and Mora et al. (2019) note that most of the smart developments being empirically examined follow a techno-centric perspective, with less focus on other types that can provide alternative views of the smart concept. The European Capital of Smart Tourism (2020) has awarded smart destinations based on sustainability, accessibility and digitisation, as well as cultural heritage and creativity. This suggests that not all smart developments are based on digitisation; however, it remains unclear how this may be possible considering that smart destinations mainly follow a technology-oriented model.

There is a lack of empirical studies on the smart development process to examine how destination change occurs to facilitate smartness (Femenia-Serra & Ivars-Baidal, 2018; Mehraliyev et al., 2020). Although scholars have started to identify the core resources and conditions necessary for achieving smartness (Boes et al., 2016; Cavalheiro et al., 2019; Meijer et al., 2016; Rana et al., 2019; Shafiee et al., 2019), Femenia-Serra and Ivars-Baidal (2018, p. 2) note that there is need for feedback from those involved in smart development. Furthermore, tourism and technology-based processes have predominantly been examined from an ahistorical perspective (Lee et al., 2013; Noori et al., 2020; Siokas et al., 2021), which signifies that social and historical factors do not influence the development process (David, 1985). However, Van de Ven and Poole (1995), Fachin and Langley (2018) and

Langley (2021) argue that for development to occur, one needs to understand the underlying change processes that occur over time. Tourism scholars have long advocated for this process-based approach through the application of path dependence (see Bramwell & Cox, 2009; Brouder, 2017). However, Sydow et al. argue that

‘although an increasing number of studies of technological, institutional and organizational change refer to the concepts of path dependence and path creation, few attempts have been made to consider these concepts explicitly in their methodological accounts’ (2012, p. 155).

This study adopts a process-based approach and path constitution analysis (PCA) to explore the development of smart destinations and specifically why some smart destinations do not follow a technology path. Smart tourism developers can use this to inform their decisions on where and how to implement smart initiatives. By adopting a path dependence approach, this study argues that destinations’ transformation to smart will be connected to past systems that have been established.

2. Literature review

2.1 Smart destination development

The smart concept has different meanings for various stakeholders (Granath, 2016). For instance, smart initiatives are based on increasing destination competitiveness in Europe, whereas in Australia, the focus is on governance, and in Asia, smart initiatives are focused heavily on technologies (Gretzel et al., 2015). However, smart tourism scholars draw on the predominant technology-based view. From this perspective, smart initiatives are based on the interconnectivity and interoperability of technological systems (Gelter et al., 2022; Gretzel & Collier de Mendonca, 2019; Sorokina et al., 2022). It signifies the optimisation of technological networks with a destination, resembling its root concept, smart cities (Ivars-Baidal et al., 2017). Optimisation focuses on creating the best solutions through maximisation and minimisation techniques (Yang, 2008). This implies that there will be a focus on finding the best resources and design to produce the solution rather than consideration of a mutually beneficially approach for all stakeholders. However, scholars argue that smart initiatives require more human-centred designs that foster inclusion and diversity for all stakeholders (Hollands, 2015). Benkler (2018) calls for greater understanding of the social aspects of a destination as lack thereof can inhibit or facilitate the smart development process.

Very little is known about smart tourism development (Mehraliyev et al., 2020). The smart destination processes in research, though based on linear approaches, still do not account for the contextual aspects (Kumar et al., 2020; Lee et al., 2013; Noori et al., 2020; Siokas et al., 2021; Zhu et al., 2014). Context-related aspects of smart development have emerged within discussions on the required resources. Shafiee et al. (2019) identify the key elements for smart tourism development as causal conditions, context conditions, intervening conditions, interactions and consequences. Cavalheiro et al. (2020) propose that a smart tourism development model is based on the ground layer, which is based on destination resources, identity, vision, and local government support; the smart ICT infrastructure layer, which enables communication; and the tourism applications layer for enabling user experiences. By drawing on these components, a smart destination can improve sustainability (Ivars-Baidal et al., 2021; Sorokina et al., 2022).

Nonetheless, Law (2018) argues that while there is a general understanding of the resources and change processes, questions remain regarding how businesses decide on types of developments in times of lock-in. Goldstone (1998, p.834) highlights that path-dependent outcomes are ‘not determined by any particular set of initial conditions.’ According to Russo and Brandais (2021, n.p.), smart development may occur due to a ‘technological lock-in.’ Therefore, path dependence, though not mentioned explicitly, may be evident in previous studies. However, smart tourism research is yet to provide a deeper understanding of the paths that have informed the changes of a destination.

Ultimately, resources can serve as barriers to and facilitators of smart development (Ivars-Baidal et al., 2017). However, historical occurrences can also determine the adoption of various types of innovations (David, 1985). This emphasises the need to deepen the understanding of the contextual conditions, which is significantly lacking in smart research (Meijer et al., 2016; Urrutia-Azcona et al., 2020).

2.2 Towards path dependence – a process-based approach

A process-based approach is needed to explain changes within organisations or surrounding a phenomenon, as it conceptualises development not as being fixed as seen in linear models but as a constantly evolving one (Langley, 2021). In the field of management studies, Van de Ven and Poole (1995) categorised these perspectives into four areas: life cycle, teleology, dialectics, and evolution theories. Langley (2021) improved upon these areas to present the four ontological perspectives of process theorising: process as activity, process as witness, process as narrative, and process as evolution. Research on tourism and smart development is mainly associated with process as evolution. It illustrates how something changes or evolves over time to account for historical details. Examples include the smart models of Lee et al. (2013) and Zhu et al. (2014); however, there are two limitations of previous studies. First, smart development is presented as a monological account, which underplays divergence or plurality of perspectives (Fachin & Langley, 2018). Second, these processes are ahistorical, which does not facilitate an exploration of the path or lock-in occurrences that can provide a deeper understanding of the formation of smart initiatives. Bramwell and Cox (2009) suggest that tourism scholars can draw on path dependence, which falls within the conceptualisation of process as evolution.

Path dependence, the less commonly used theoretical approach, is an evolutionary economic perspective that was formulated by David (1985) after examining supplier’s lack of adopting alternatives to replace QWERTY keyboards. Path dependence acknowledges the importance of connected and disconnected historical events in explaining the adoption of new processes, mainly in instances where more efficient pathways exist (David, 1985; Puffert, 2002). According to path dependence,

‘history matters [...] the respective events represent initial conditions that, by triggering a self-reinforcing process, have an enduring impact upon the course of the path’s future trajectory’ (Sydow et al., 2012, p. 157).

A technology is considered path-dependent when it is difficult to implement a viable technological alternative due to increasing returns. As a result of positive feedback mechanisms, over time, technological solutions may eventually become locked-in (David, 1985). While this assumption has not yet been explored in research on technologies in tourism, Bramwell and Cox (2009) found that the establishment of a steering group for tourism collaboration in the United Kingdom was a historical trend that existed in other

countries. The inclusion of multiple suppliers in the process also stemmed from a past culture of consultation. Although the theory has been applied in tourism, current studies lack a methodological approach for analysing paths (see Ma & Hassink, 2014). Scholars note that while current developments can be linked to historical occurrences, not all will illustrate the notion of path dependence (Wang et al., 2022). Furthermore, innovations resulting from path dependence and those that have not may have commonalities such as sharing the same type of resources (Sydow et al., 2012). Following David's (1985) original thesis on path dependence, Sydow et al. (2012) designed path constitution analysis (PCA).

Management scholars have provided conceptual and methodological guidance for applying the theory of path dependence, through the application of PCA, to ascertain whether decisions made or innovations formulated at present were shaped by a series of events (Garud et al., 2010; Sydow et al., 2009; Vergne & Durand, 2010). PCA incorporates the following features: level interrelatedness, triggering events, non-ergodic processes, self-reinforcing processes, lock-in, and multiple actors who contribute to producing the path. Level interrelatedness activities should be analysed at the level of the organisation but also at the macro level. This provides a view of the path within a wider social context. A triggering event is an activity that is accompanied by self-reinforcing processes which decide the future trajectory of the path. Self-reinforcing processes are sequential events that are in line with or overlap with each other. Non-ergodic processes signify that the path is not random. Many paths will be available, but the number will decrease over time (Garud et al., 2010). Lock-in is an outcome of self-reinforcing processes. Stakeholders will only view one option as legitimate. The last constitutive feature is multiple actors, which refers to individual or collection groups of stakeholders (Sydow et al., 2012).

3. Methodology

A case study research design is applied, as it is typically used in instances where a situation is deemed to be distinct (Yin, 2014). Smart tourism studies predominantly embrace a technological perspective, which is evident from the meanings and models applied in different studies (Hollands, 2015; Mehraliyev et al., 2019; Mora et al., 2017). Furthermore, Gelter et al. (2020) highlighted the need for more case studies, as the research domain is dominated by conceptual articles. This paper explores Ljubljana in Slovenia, a destination that has been recognised as smart, having been awarded the 2019 and 2020 European Capital of Smart Tourism. The destination has over 45 smart initiatives.

A case study research design was applied using qualitative data collection, specifically, semi-structured interviews with tourism stakeholders involved in the tourism industry in Ljubljana. The data were collected between February and September 2019 after obtaining ethical approval from the University of Nottingham. The data were gathered from 31 supplier organisations that were asked to complete participant consent forms prior to interviews (see Table 1). They lasted between 20 minutes and 1 hour and were recorded using a digital voice recorder. The interview questions focused on participants' affiliation with the business, general information about the organisation, and Ljubljana's smart tourism development. Face-to-face interviews provided the opportunity to access online and offline documents that aided in enhancing the trustworthiness of the findings (Yin, 2014). Participant and document numbers will be used during the reporting of the findings.

Table 1: Details of Participants

Type of Establishment	Participant Code	Department	Year(s) of Service	Gender
Accommodation	1	Executive office/general management	15	Female
Accommodation	2	Sales and marketing	8	Male
Accommodation	3	Sales and marketing	8	Female
Accommodation	4	Sales and marketing	12	Male
Restaurant	5	Sales and marketing	12	Male
Accommodation	6	Sales and marketing	12	Male
Accommodation	7	Executive office/general management	11	Female
Restaurant	8	Executive office/general management	11	Female
Destination marketing and services	9	Executive office/general management	10	Male
Restaurant	10	Executive office/general management	10	Female
Accommodation	11	Executive office/general management	12	Female
Attraction	12	Executive office/general management	10	Female
Tourism consulting services	13	Executive office/general management	6	Female
Destination marketing and services	14	Sales and marketing	1	Female
Destination marketing and services	15	Sales and marketing	2	Female
Attraction	16	Marketing	15	Female
Attraction	17	Executive office/general management	2	Female
Restaurant	18	Executive office/general management	3	Female
Attraction	19	Executive office/general management	2	Male
Attraction	20	Sales and marketing	30	Male
Transportation service provider	21	Executive office/general management	15	Male
Transportation service provider	22	Executive office/general management	2	Male

Attraction	23	Sales and marketing	15	Female
Attraction	24	Sales and marketing	3	Female
Attraction	25	Sales and marketing	3	Female
Transportation service provider	26	Executive office/general management	15	Male
Accommodation	27	Executive office/general management	6	Male
Accommodation	28	Sales and marketing	10	Female
Technology company	29	Consultant	2	Female
Educational institution	30	Consultant	14	Male
Educational institution	31	Consultant	20	Male

The interviews were transcribed verbatim in NVivo software and then coded. Fachin and Langley (2018) recommend that thematic analysis be used to capture individual accounts. Consequently, the study draws on PCA as guiding theoretical framework and Braun and Clarke's (2006) thematic analysis, which is frequently applied in tourism research. The process included the following steps: familiarisation of data, initial coding, searching for themes, reviewing themes, defining and naming themes, and reporting findings. Themes were identified first in a deductive manner and then inductively to allow new sub-themes to emerge. The dataset was analysed three times by the main researcher and another hospitality and tourism researcher with similar interests in technologies in tourism. The emerging themes provided case-specific and generalisable data (see Figure 1) and resulted in the creation of novel insights for the smart tourism literature (see Figure 2).

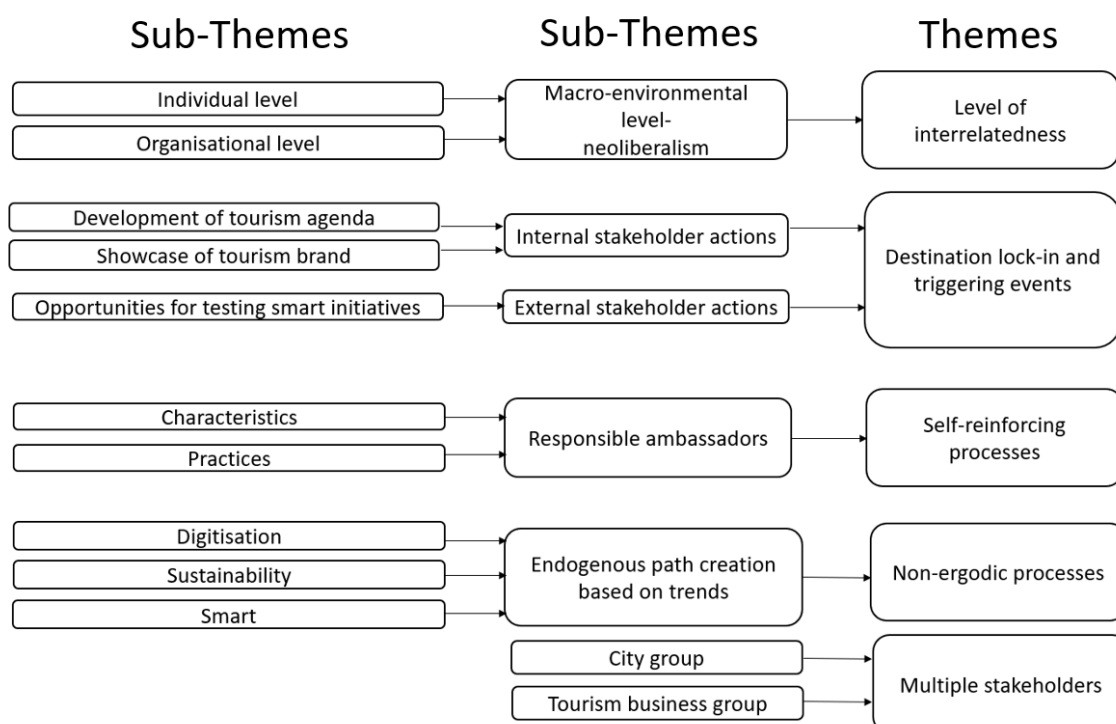


Figure 1: Final Themes and Sub-Themes of Path Dependence for Smart Destination Development Based on Sustainability

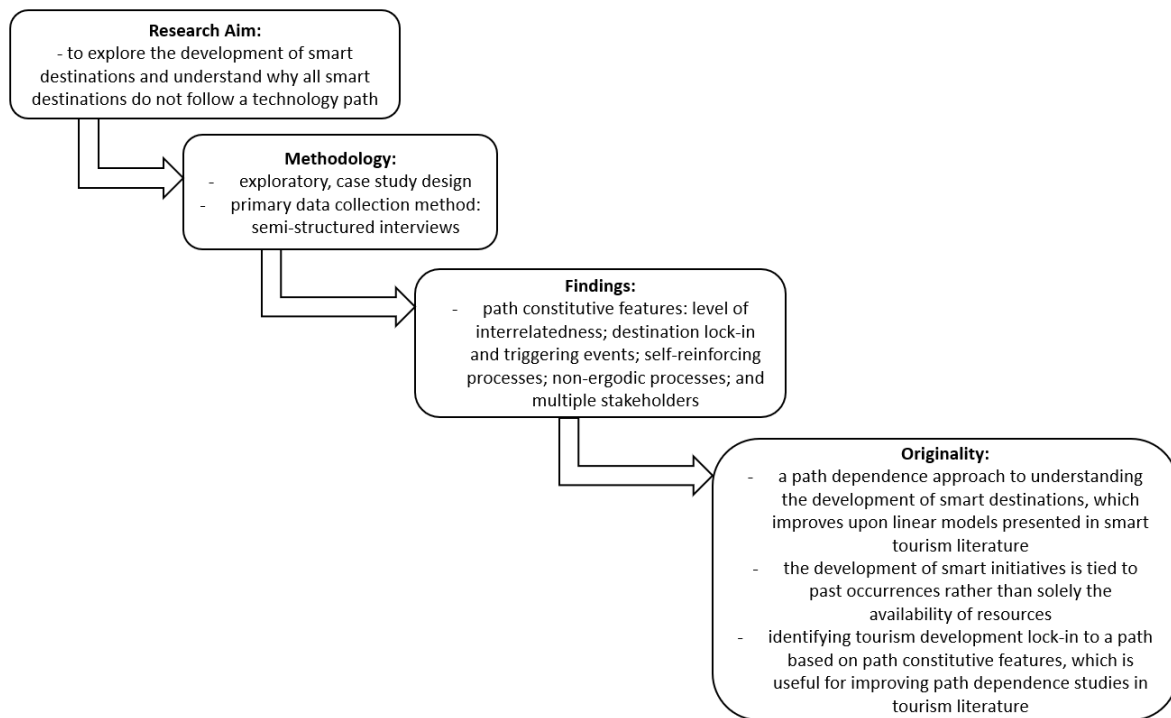


Figure 2: Overview of the Findings

4. Results and discussion

4.1 Smart tourism development emerging from a sustainability path

Smart development is deemed possible once the core components are in place (Boes et al., 2016); however, Participant 31 noted that there are differences in the focus of the developments both locally and globally, thereby highlighting the contextual nature of these initiatives and expanding on previous examples noted by Gretzel et al. (2015):

‘I would say that nationally, Ljubljana is smart (due to its focus on sustainability), internationally, Ljubljana is an average city destination in terms of smartness (technology), nowhere near Copenhagen or Hong Kong and so on’ (Participant 31).

Participants noted that much of their understanding of smartness was associated with sustainability rather than digitisation, to which many were opposed. This illustrates what Sydow et al. (2012) refer to as lock-in, which is when one path becomes dominant due to self-reinforcing processes.

A discussion follows of the constitutive features that underlie this sustainability path. Features include level of interrelatedness, destination lock-in and triggering events, self-reinforcing processes, non-ergodic processes, and multiple stakeholders. Therefore, sustainability is seen as a key input driving rather than an outcome of smart initiatives, which is predominantly noted in smart tourism literature (Gretzel et al., 2015; Khan et al., 2017; Soares et al., 2021).

4.1.1 Level of interrelatedness

A path can be bounded by individual, organisational, or macro-environmental levels, wherein various interactions unfold (Sydow et al., 2009). Unlike Sydow et al.'s (2009) view, this study found that the individual and organisational levels are tied to happenings at the macro-environmental level. The macro-environmental level significantly influenced smart tourism development in Ljubljana, which is linked to practices associated with the sustainability path. Participant 5 was asked about Ljubljana's status as a smart destination and noted that the city had become an active and willing neoliberal destination within the European Union. This indicates the interplay between local and regional governance systems that is often missing in development process (Sydow, 2022) and smart tourism studies, which note the importance of the local stakeholders such as destination management organisations (Sorokina et al., 2022) and local municipalities (Boes et al., 2016).

In Ljubljana, there was the restructuring of state-owned hotels and a proposal for an investment credit line for tourism companies to increase the competitiveness of the destination. Participant 5 acknowledged that the ongoing smart development is a part of these developments and that less attention and deep consideration would be given to the execution of smart initiatives by those who promoted smart development in Ljubljana. Instead, there was increased emphasis on promotion rather than implementation of initiatives:

‘so we will be very active in kind of, formally, officially adopting new things but will be much slower with the implementation of those’ (Participant 5).

The economy influenced not only the development of Ljubljana as a smart destination but also the residents in the city. Individuals chose to engage in economic pursuits such as the sharing economy. Participant 23 mentioned that Airbnb properties were filling a gap, that is, the shortage of rooms in Ljubljana. At the time of collecting data for this study, there were 300 listings located in Ljubljana (Airbnb, 2020). Since the increase in these types of lodgings, Participant 23's property had faced increased competition:

‘there is a lot of Airbnb. Capacity now, anyhow, competition. Yeah’ (Participant 23).

Ljubljana's development of smart initiatives has been a part of its long-term efforts to develop the economic status of the destination, which began after it gained independence from Yugoslavia in 1991. The country underwent a period of slow growth and struggled to achieve development as an independent nation. Participant 3 described their experience of one of the few infrastructural developments to aid connectivity and efficiency in Ljubljana during the 1990s:

‘before, we did not even have a normal highway from M to Ljubljana, it was just a normal regional way. You had to come from the Austrian border, from G to Ljubljana. It took 2 hours. Now, you can get here in 1 hour. Roads were built that crossed over Slovenia north and east, west’ (Participant 3).

In addition to local concerns, the destination management organisation (DMO) was concerned about how potential tourists perceived the destination. After gaining independence from Yugoslavia, Slovenia underwent a brand reimagining process because of the negative impact of wars of succession (Naef & Ploner, 2016). First, it formulated the tagline ‘The Sunny Side of the Alps’ to demonstrate that it was a destination which was accessible in summer and winter while aligning itself geographically with Central Europe rather than Eastern Europe. In 1996, Slovenia launched the ‘The Green Piece of Europe’ campaign,

which was its first official campaign focusing on the importance of environment sustainability (Hall, 2000; 2003). Findings enhance previous studies by illustrating that sustainability influences for smart development did not emerge from regional and global discussions such as the Kyoto Protocol (Cocchia, 2014) but were at the centre of the destination's national and local efforts prior to its transformation into a smart destination.

4.1.2 Destination lock-in and triggering events

According to Sydow et al. (2012), a path, which ultimately leads to a destination lock-in, is initiated by triggering events that are based on the actions of individuals involved in or external to the development. A review of strategic tourism plans from 2007 showed that the word 'smart' first appeared in the Strategy for the Sustainable Growth of Slovenian Tourism for 2017–2021 under the heading 'smart mobility'. Therefore, sustainability existed on the tourism agenda prior to smartness, which is contrary to it being noted as an output in smart tourism (Gretzel et al., 2015). Smartness appears to have played a supporting role, whereas sustainability was a lead character in the tourism plan. In other words, smart initiatives such as urban smart cards play a practical role for achieving sustainability in Ljubljana. Participant 14 mentioned the tourism plan, which stated that one of its measures for tourism during the four-year period was

'smart mobility – including public passenger transport in Slovenian tourism, developing urban smart cards, projects for calming traffic in tourist destinations, and the development of alternative solutions' (Participant 4).

There has been no development of smart plans since the sustainability tourism plan, which may also indicate why discussions on such documents have been lacking in tourism literature. Martin and Sunley (2006) suggest that the rationale for this is that institutions and developments may co-evolve and ultimately become locked-in since other structures which may emerge are not deemed efficient and effective. As there was no smart strategy in Ljubljana, smart tourism development drew upon existing tourism plans and Vision 2025. Ideas and details needed to be aligned with the vision and the theme of sustainability, illustrating the role of path dependence.

In Ljubljana, the success of each initiative increased the city's profile as a place for 'testing' and 'proof' (Participant 9), resulting in its ongoing image as a test site for smart initiatives. Participant 9 highlighted that this is 'not typical', further illustrating the occurrence of a lock-in to smart initiatives (Sydow et al., 2012):

'now we (destination management and service business) have one hundred million projects for the water supply. It's okay. But this is not typical' (Participant 9).

Furthermore, Participant 9's feedback illustrates that in as one of the key decision makers, they do not have the capability to limit the number of initiatives they receive. This is contrary to the assumption that developers are usually in control of the trajectory of smart development through the top-down management style (Boes et al., 2016; Meijer et al., 2016) or strong political leadership for sustainable destinations (Sorokina et al., 2022). Participant 19 was optimistic and welcomed these changes. However, there was also a loss of autonomy since the city had to prioritise the testing of these smart initiatives over their own.

4.1.3 Self-reinforcing processes

Sydow et al. (2012) describe self-reinforcing processes as reinforcement practices executed by individuals, which ensures that lock-in occurs following triggering events. Based on this, sustainability is an actual practice rather than solely representing a core principle in the conceptual models of smart destinations (Ivars-Baidal et al., 2019). While Ivars-Baidal et al. (2021) noted recently that this can occur through programmes and indicators to guide the destination, this study shows that it is also evident in individual actions.

Tourism suppliers are regarded as active integrators and value co-creators in smart tourism (Boes et al., 2016). However, in Ljubljana, residents, including the mayor, had the responsibility of representing Ljubljana as ‘ambassadors’:

‘the most important ambassadors for Ljubljana are undoubtedly our residents, who immerse themselves in the mix of cultures and always ensure a touch of comfort and warmth with their openness, kindness and hospitality’ (Document 1).

Residents have the responsibility not only to represent Ljubljana as ambassadors but also to ensure the success of smart initiatives based on a sustainability path:

‘but the fact remains that the individuals are the ones who decide whether they will take advantage of these opportunities, and that is why we are putting a lot of effort in awareness-raising of residents so they would take a greener sustainable path’ (Document 2).

Participant 23 was asked about their reason for participating in smart initiatives, and they responded by justifying their role in preserving the natural environment, thereby reinforcing Sorokina et al.’s (2022) view of locals’ focus on specifically environmental issues in smart destinations:

‘this [being smart] is important. I mean, if you just throw it (waste) somewhere in the woods, first it doesn’t look nice, it does not belong there, why. I don’t have any in my living room at home. I have also. At home, you have cleaner. If you have your home clean, if I go to the woods or if I go out, it’s nice if it’s clean”’.

Residents of Ljubljana were classified as the most important stakeholders and beneficiaries in the smart development process through self-reinforcing practices, which adds a new dimension to Bulchand-Gidumal’s (2022) view of the smart sustainability framework that only incorporates infrastructure, destination planning, and tourism economy. These individual practices were not met with mutual acceptance by local citizens, as the mayor emphasised that there was difficulty in altering local habits:

‘although changing people’s habits is the hardest task, our residents prove they are prepared to change certain points of view, especially when they are acquainted with all the benefits such changes bring and can take part in their creation’ (Document 3).

The purpose of the government was not only to oversee smart development, as suggested in the smart destination research (Boes et al., 2016; Zhu et al., 2014), but also to produce responsible citizens. Once citizens successfully embraced smart initiatives, this led to increased recognition and promotion of the destination. Going beyond previous studies, individual and organisational behaviour were found to be complementary, as they further increased lock-in to a sustainability path to smartness.

4.1.4 Non-ergodic processes

Whereas the previous discussion on the triggering events illustrated a type of lock-in based on direct association with sustainability and smartness, this was not always the case. According to Sydow et al. (2012), a path can have a variety of options at the start, and then a lock-in occurs gradually as options are reduced. After the implementation of numerous smart initiatives aligned with sustainability, the focus of smartness in Ljubljana changed to digitisation. Ljubljana was given an award for digitisation in October 2019 in the European Capital of Smart Tourism category. This is unlike the case of most smart cities, which concentrate initially on digitisation (Yigitcanlar et al., 2019).

Ljubljana was recognised for implementing initiatives such as green supply chains, web platforms, Taste Ljubljana, the Ljubljana by wheelchair mobile application, multisensory museum guided tours, mobile audio guides, mobile parking, digital city guide, electric car sharing, the tourist card Urbana, and the bike-sharing scheme. However, many of these initiatives existed prior to receipt of the award, illustrating that the destination was committed to its long-held path of sustainability rather than completely embracing digitisation through advanced technological initiatives such as big data platforms (Noori et al., 2020). This supports Urrutia-Azcona et al.'s (2020) view that smart cities can be influenced by certain paths which deny practitioners flexibility in adopting new perspectives. Technological developments are driven by a process of increasing returns on investment (Martin & Sunley, 2006) however, this study shows that the sustainability path was adhered to even in the midst of possibilities through digitisation.

4.1.5 Multiple stakeholders

Participants in smart tourism initiatives emerged from two stakeholder groups: the city group for urban development that focused on sustainable initiatives, and the tourism businesses group, such as hotels and attractions. While previous studies drew attention to the complex networks of smart developments (Del Chiappa & Baggio, 2015), they were unable to uncover the complexities associated with these networks, such as how and why cooperation occurs amid an increasingly competitiveness environment (Sydow, 2022). The Ljubljana Vision 2025 formulated by the municipality office had a wide appeal, which facilitated the inclusion of businesses associated directly and indirectly with the tourism industry. The range of suppliers was captured in the following extract from a smart city brochure published by one of the research organisations involved in the development of smart Ljubljana:

‘SRIP [Strategic Research and Innovation Partnership] Smart Cities and Communities Partnership brings together over 140 companies and research institutions from all over Slovenia . . . Strategic Research and Innovation Partnership Smart Cities and Communities covers several research areas and the ICT horizontal providing key technologies. Key areas – energy and utilities, health, mobility, transport, logistics, smart city ecosystem, safety, urban life quality. ICT Technologies – cyber security, digital transformation, GIS-T, HPC and Big data, IOS and IOT’ (Document 6).

The vision that guided smart development in Ljubljana did not encourage supplier integration:

‘ideal city – preserve the character of an agreeable green city, its dimension and convenient living standards will make it a nice place to live in; environmentally friendly city – considers an option of a direct access to the open space as well as the integration of the city into the landscape system; little metropolis – grant high living standards, security and tolerance. The city, opened widely for foreign investors and

experts, will gradually acquire the cosmopolitan character and image' (Online Document 1).

The vision indicated that the focus of Ljubljana was on creating a city that would be considered an ideal, environmentally friendly metropolis, thereby guiding the actions of the various stakeholders towards sustainability efforts. While the deliberate decision to align with these specific groups may aid efficiency, they also contribute to having a narrow focus. This situation is unlike the case of newly constructed smart cities, such as those mentioned by Zuzul (2019) that involve diverse stakeholder groups with varied perspectives and meanings of smart that result in limited or stagnated smart development.

5.1 Conclusion

Although some studies have focused on the resources and a small number have focused on the developmental process of smart tourism development, there is a need to gain further insights that can enable the transformation towards smart destinations, which are not only technology-oriented but also human-centred. Very few destinations have started to embrace other types of smart destinations, and there is limited knowledge of how destinations are able to do this when there mainly exists a predominantly technological perspective. Findings suggest that past developments contribute to the development of smartness, however, not all historical developments play an equal role in contributing to Ljubljana's recognition for as a smart destination. Ljubljana's smart development was underpinned predominantly by its long-established sustainability path, resulting in it significantly contrasting the traditional techno-centric smart destinations and cities (Mehraliyev et al., 2019). The study reveals the contextual nature of smart developments and broaden the examples that have been noted in literature (Gretzel et al., 2015). In this case, sustainability is seen as a key input rather than an effect of smart initiatives, which the latter is the way it is being discussed in literature (Soares et al., 2021). While the global technological developments represent macro-environmental occurrences affecting smart development, the path to neoliberalism also has a significant influence. The trajectory of a smart destination is not only based on the mandates of destination leaders as noted by scholars (Boes et al., 2016) but also self-reinforcing processes by locals and specific events.

The research has theoretical implications for both research on smart tourism and tourism development. Previous studies examine the development of smart tourism through a linear approach, which does not question the underlying context that is driving the formation of smart initiatives. Therefore, the study draws on path dependence approach to highlight the path that guide the development of a smart destination. While recent developments of smart destinations illustrate purposive planning and formation through the application of linear ahistorical models (Zhu et al., 2014), this study shows that development is constrained by existing historical structures. The sustainability path that underpin Ljubljana's development shows that the focus of smart destinations is not dependent on individual stakeholders or agency (Boes et al., 2014) but instead on context-dependent events. Thus, available resources are not sufficient for determining the type of smart destination that will emerge (Cavalheiro et al., 2020). While previous tourism studies have applied the concept of path dependence (Bramwell & Cox, 2009), research lacked the theoretical framework of path constitutive analysis, which was formulated by Sydow et al. (2012) for detecting this occurrence. The study also responded to the need for an increase in empirical findings, specifically cases that examined smart destinations and suppliers' perspectives (Gelter et al., 2020).

The findings have practical implications for destination management and smart tourism developers. By providing an understanding of the role of path dependence in smart development, smart tourism developers can be aware of the factors that can enhance or prevent change at the destination level. Consultants for smart developments are sometimes not embedded within the destination structures and processes. They will be aware of whether certain processes are in place to attain certain goals, namely smart destination with a sustainability focus. Developers can also use the insights to hasten the implementation of smart initiatives. Destination managers can better evaluate their destination's current state and make improved predictions as to whether they can be recognised as being smart. Like organisations, destinations aim to achieve a return on investments from resources that they have already been committed to. Therefore, any decision regarding their future endeavours needs to be in line with the invested resources. This has become even more important in high cost and risk environments (Wang et al., 2022) such as the current period of the COVID-19 pandemic- a time of financial uncertainty and inflation (Bloomberg Live, 2020). Therefore, adopting smart destination initiative will likely need to complement previous activities and changes (Sydow et al., 2009).

The concept of path dependence has some limitations as it assumes that continuation along a particular path may be non-exhaustive, however, paths can come to an end due to situations in the global environment (Vergnee & Durand, 2010). Therefore, scholars can draw on data since the COVID-19 pandemic, an era of increased digitisation, to understand responses from smart destinations such as Ljubljana. The study focused on the case of Ljubljana, which limits the generalisability of the findings to this and similar destinations (Yin, 2014). To increase the trustworthiness of the findings, a multiple case study approach can be applied by smart tourism scholars to understand change in various types of smart development (Laudien & Daxbock, 2016). A qualitative data collection method is appropriate for studying path dependence (Sydow et al., 2012). However, interviews can be conducted to ascertain whether practitioner meanings' change towards smart tourism. This research can also be further improved on by considering incorporating archival data and observations for narrative analysis to provide in-depth understanding (Langley et al., 2021).

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