



Post-Smart Tourism Destination: Have We Been Wise Enough?

Diaz Pranita¹

¹Department of Tourism Business Management, Universitas Indonesia, Depok, Indonesia,
d.pranita@ui.ac.id

Abstract. As there are massive initiatives on smart cities all over the world, smart tourism as part of urban and rural development emerges as destination's panacea to gain competitiveness. Smart tourism is widely understood as the utilization of digital technology to co create experience with all stakeholders in digital platform. There is a tendency that it overlooked the distinctive aspects of tourism experience as the source of competitive advantage and has created a mass technology-based customization that minimize focus on destination's unique resources and sense of place. This paper intends to revisit smart tourism concept and explore post-smart tourism development as a wiser, more humanistic and emphasis on the sense of place consideration in the tourism development. It is a conceptual paper exploring several case studies on smart tourism development in Indonesia. The results show that smart tourism is the ability of tourism entities to create unique experience, educate the market with its distinction and the appropriate way to consume it according to the destination values, while at the same time being customized and accessible so that the destination can stand out in their own characteristics. The implication of the research is that destination should define and determine its unique smart concept wisely and inclusively, make it accessible to achieve a more sustainable competitive advantage.

Keywords: tourism development, post-smart tourism, wise tourism, sense of place, locality

1 Introduction

The proliferation of digital technology has made smart tourism destination (STD) becomes the most used strategy in global tourism development in the last decade. The approach is widely used not only in the matured but also the emerged tourism destination (Ercan, 2023). The milestone of STD began when some scholars proposed that ICT can be employed in making destinations competitive through access to digital platform (Buhalis, 2003), conducting digital marketing and co creation of experience (Buonincontri & Micera, 2016).

While smart tourism can act in redeveloping image improvement, reach new market segments, support urban regeneration, and contribute to resource efficiency (Iman Pribadi et al., 2021), the smartness concept and application in tourism development is not without any challenges and complaints whether in technological, anthropological and sustainability aspects. There is a need to consider privacy preservation through privacy policy and security methods, culture heritage preservation and promotion, reliable recommender system, and local inclusion (Sabou & Maiorescu, 2020). (Iman Pribadi et al., 2021) also mentioned the disadvantages of smart tourism as it is costly, under presented sustainability as ICT also a threat to sustainability as it also produces CO₂ emission, while sometimes lack of widely social inclusion.

(Weaver & Moyle, 2019), in stronger words, reminds the destinations that to be smart, they need smart tourists. Destinations must refer to tourist stupidity matrix as guidance to educate tourists at tourist destination to mitigate the adverse effects of excessive emphasis on meeting tourist expectations and excessive personalization. This approach aims to minimize future negative incidents and outcomes. The presence of stupidity in this context is characterized by its obstinate and calculated nature, as well as its ironic undertones. It involves the factors of attitude, social norms, and perceived control over behaviors, which in turn influence one's intentions and subsequent actions. Two-way learning with a mitigative approach potentially reduces stupid actions, even though cannot completely eradicate them. There is also issues such as technophilic over the consumer as primary indicator of destination stupidity (Weaver & Moyle, 2019). On the other hand, the advancements in technology could also inevitably introduce new opportunities for errors within the system or among participants (Ballina, 2022).

The issue of personal security and privacy is a significant underlying determinant of technological inferiority (Yang et al., 2022). There are additional concerns such as information overload, cognitive strain, and inauthentic encounters, that should be noted that these systems can enhance familiarity and facilitate adaptation based on an individual's immersion tolerance (Iman Pribadi et al., 2021). Coca-stefaniak proposes new approach to *smart* or *smartness* from rather narrow technological interpretations in the form of mobile devices to more nuanced applications involving geographical locations (Andres Coca-Stefaniak, J., & Seiseddos, 2020).

The utilisation of ICTs has experienced significant advancements in order to enhance the experiences of tourists and visitors. Simultaneously, these technologies have also facilitated broader automation processes. However, the tourism industry, which has traditionally relied on technology-driven approaches, continues to face the ongoing challenge of transitioning towards a new trend. This new trend involves the emergence of smart initiatives that prioritise a more human-centered approach. The emerging trend expands the concept of smart tourist destinations to encompass smart tourism cities within a broader geographical area. Coca-Stefaniak asserts that smart tourist destinations find themselves at a critical juncture in their evolution, necessitating a shift away from conventional technology-centric endeavours towards a novel breed of smart tourism destinations that effectively reconcile the often divergent global and local

trends. Some of the key issues encompassed in this context are overtourism, climate change, terrorism, gentrification, increasing demands from local residents for enhanced urban environments, declining city centre retail activity as a result of the digital retail revolution, and the pursuit of genuine transformative experiences by emerging generations of tourists and visitors. There is a contention that forward-thinking tourism cities will embrace a novel strategic approach centred on urban sustainability as a comprehensive paradigm. This shift will give rise to a fresh wave of intelligent tourism destinations, commonly referred to as urban living labs. The proposed conceptual framework integrates components from established sustainability and tourism frameworks. It employs a systems-based approach to managing urban tourism destinations, incorporating elements of smart innovation as catalysts for addressing various factors that impact the sustainability of tourism destinations. This approach operates within an acceptable change domain, which encompasses the tensions between global and local considerations that arise at different stages of a tourism destination's life cycle. This study seeks to reexamine the concept of smart destinations in the context of a more informed and advanced stage of tourism development, focusing on the unique attributes of specialised tourism destinations. The primary aims of this research are to ascertain the underlying principles of the smart concept in niche tourism destinations and to formulate an enhanced post-smart tourism model.

2 Literature Review

2.1 The evolution of smart tourism destination concept

Initially, Poon mentioned tourism is complex services as it requires integration, activation and coordination within related industries, and it is also an information intensive industry. Thus she predicted that ICT would play an important role in the delivery of tourism services, management of tourism, producer and customer relationship, and marketing (Poon, 1988). A decade later, Buhalis reminded technology disruption in tourism industry that should be addressed as ICT is more and more become interactive partner in tourism marketing, distribution, promotion and coordination. It provides efficient cooperation and tools for globalization, while it connects intra-organization, inter-organization and consumer (Buhalis, 1998).

Later, rapid development of ICT and internet technology has made tourism entering the sophisticated e-tourism or electronic tourism, the digitization of all the processes and value chains in the tourism, travel, hospitality and catering industries enabling organizations to maximize their efficiency and effectiveness. The milestone of e-tourism is the massive creation of websites and booking engines to provide information for tourists and the parties in tourism value chain (Buhalis, 2003; Ezzatul et al., 2011), which is considered as the beginning of smart tourism, the e-tourism's extension which includes a structure in which the destinations, visitors, businesses, and other service providers all use smart technologies (Ercan, 2023).

STD is actually the adaptation of the smartness over all city concept to the development and management of tourism destinations (Wang et al., 2013), and become the center and latest research topics in the tourism literature (Gomes et al., 2017), (Vecchio et al., 2018), (Tyan et al., 2020), (Sumaryadi et al., 2020), (Mello & Faxina, 2021), (Revilla et al., 2022), (Pranita et al., 2023). Cities worldwide have been undertaking smart city initiatives to enhance the quality of life for their residents and promote the long-term viability of urban and tourist regions. This has led to the recognition of the concept of sustainable smart tourism development (SSTD) as a significant area of research interest (Cavalheiro et al., 2021). Furthermore, the influence of technology on the promotion and marketing of tourism destinations, as well as its role in facilitating tourists' mobility within the destination, has been identified as additional factors contributing to the growing significance of STDs (Liberato et al., 2018).

Rusu and Cureteanu (2009) highlighted the impact of smartphones, mobile internet, and mobile applications, such as Google Earth and Amadeus, on the facilitation of tourist travel. They also noted the growing prevalence of smart destination applications in this context. These smart technologies facilitate many transactions, including acquiring destination information, making reservations, and detecting locations. Hence, the topic of STDs has been examined from several angles by numerous scholars. According to Koo et al. (2016), destination social media channels and websites play a crucial role in facilitating communication with tourists and enhancing their travel motivation in STDs. According to Boes et al. (2016), the key elements of STD are innovation, social capital, human capital, and leadership. The authors emphasize that the integration of these components is crucial for enhancing the competitiveness of smart destinations. In their study, Vecchio et al. (2018) shown the efficacy of utilizing social big data derived from social media platforms in facilitating the decision-making process pertaining to STDs.

As STD becomes the objective to reach for every destination the world, scholars start to realize some challenges in its implementation and practice. STD becomes too much focusing on technology adoption and being accessible for markets, sustainability that is the global issue that should be addressed in all tourism development is overlooked, despite consensus in the definition of smart tourism destination as an ICT based territory that must be able to optimize the use and exploitation of tangible and intangible assets through the participation of multiple stakeholders, to promote sustainable development and be able to increase the quality of life of citizens (Santos-Júnior et al., 2020). Santos-Júnior et al. state that smart tourism should be focused not only to obtain ultimate tourist experiences but also quality of life improvement.

Since the emergence of smart tourism and STD in 2010s, the studies grow to niche smart concepts such as smart island (Long & Zhang, 2021) (Pantazis et al., 2017), smart island tourism (Bulchand-Gidumal, 2022), (Díaz Domínguez et al., 2017), smart tourism villages (Ciolac et al., 2022), (Rudwiarti et al., 2021), (Flores-Crespo et al., 2022), (Priyambodo & Artianingsih, 2022), smart sustainable tourism destination (Santos-Júnior et al., 2020), (Kunzmann et al., 2020), smart tourism cities (Ivars-Baidal et al., 2023), Smart tourists (Sabou & Maiorescu, 2020), and new generation wiser post smart

tourism (Andres Coca-Stefaniak, J., & Seisdedos, 2020). The premise of this argument is that there is a need to shift away from conventional technology-centered initiatives and instead embrace a novel cohort of sustainable tourism development strategies. These strategies must effectively navigate the intricate interplay between global and local dynamics, while simultaneously addressing a range of pressing issues such as overtourism, climate change, terrorism, gentrification, the escalating demands of local residents for enhanced urban livability, the decline of city centre shopping due to the rise of digital retail, and the pursuit of authentic transformative experiences sought by emerging generations of tourists and visitors. Cities that aspire to be leaders in tourism will embrace a novel strategic approach centred on urban sustainability, which is conceptualised as a comprehensive paradigm. This approach involves the establishment of urban living labs. In short, the evolution of smartness in tourism can be seen in Figure 1 below.

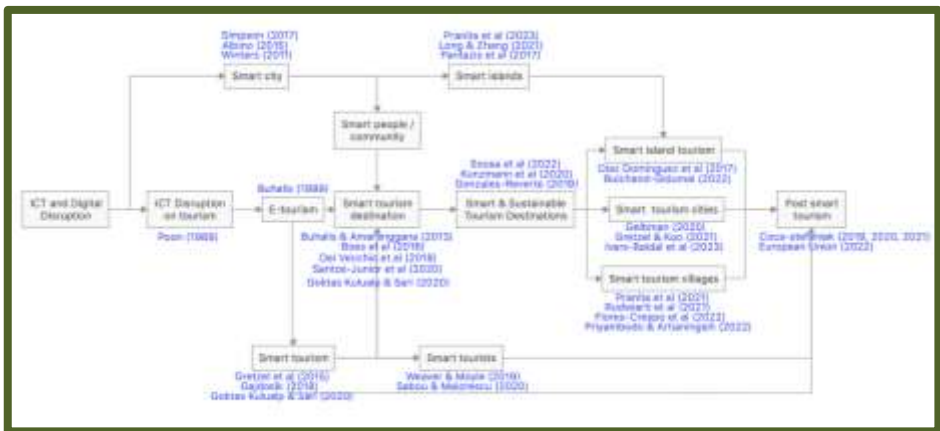


Figure 1. Evolution of smartness in tourism development
Source : Researcher’s synthesis

2.2 Tourism destination, sense of place, and placemaking as the core of tourism destination development

In the context of tourism destinations, Zhou et al. (2021) assert that a place can be developed to establish a connection between materiality and meaning. This development occurs through an ongoing and open process that integrates the social, cultural, and natural components of the place. The phenomenon of engagement and interaction necessitates both physical presence and active participation, which are consistently shaped by various factors such as the physical environment, historical context, social dynamics, and cultural elements. These elements together lead to the establishment of a collective understanding and connection to a particular location or setting.

The concept of sense of place is formed via specific encounters and reciprocal expressions of social experiences that are deeply rooted in subjective and emotional connections. The concept of "sense of place" pertains to the subjective perception and

emotional experience of individuals, rather than the inherent qualities of a physical location. Sense of place endows specific locales with distinct and exceptional attributes, cultivating individuals' sense of connection and affiliation with these places. The concept of sense of place refers to the process through which individuals ascribe particular significance to a certain location based on their assessment of its unique characteristics and cultural values. Stedman incorporated social perspectives by drawing upon the principles of environmental psychology. He posited that the interplay between individuals and their surroundings, as well as their subjective interpretations of the environment, exert a significant influence on human behaviour. The concept of "sense of place" refers to the manner in which individuals identify, form attachments to, and rely upon a particular location. The concept of sense of place has emerged as a significant factor in the realm of tourism development. The study of tourists' expectations for places or destinations, their perceived worth, and their overall pleasure with the tourism experience can be examined by considering the concepts elucidated by the sense of place.

The conceptualization of sense of place by certain scholars encompasses multiple dimensions of evaluation, including place identification, location reliance, social bonding, and place attachment. Brocato et al. (year) introduced a conceptual framework consisting of three primary dimensions for comprehending the quality of sense of place: place identification, location reliance, and social bonding. Deutsch et al. (year) proposed the notion of sense of place, which encompasses the dimensions of place satisfaction, community, and atmosphere. Place identity (PI) is a concept that pertains to an individual's personal identity, which aligns with the physical and social characteristics of a particular place. In other words, it encompasses the personal image that is manifested and significant within the actual surroundings. The fundamental essence of this idea pertains to the social identity theory, which posits that individuals possess multiple social identities by delineating themselves into several social groupings. PI emerges as individuals amass experience that is connected to a particular location. It encompasses localized experiences that are shaped by social features, including the perspectives and recollections of other individuals associated with the place.

Place dependence (PD) refers to an individual's subjective perception of the strength of the connections between themselves and particular locations. According to Backlund and Williams, the concept of perceived discrepancy (PD) pertains to a person's subjective assessment and evaluation of the functionality of their environment. In other words, it refers to the extent to which an individual perceives their environment as capable of meeting their needs. PD can also be used to denote the extent to which a location deviates from other potential or alternative choices in fulfilling the criteria of the objective. Consequently, perceptual dependence (PD) can be defined as an individual's reliance on the surrounding environment, as perceived and understood through a functional lens. Social bonding refers to the establishment of interpersonal connections among individuals within a specific geographical or social context. The establishment of a robust emotional connection is contingent upon the presence of a conducive physical environment, which encompasses the community, culture, and interpersonal connections. In addition to physical space, it is imperative to consider social elements. Ramkissonn

conducted a study that examined social bonding as a cognitive component, focusing on the analysis of interpersonal relationships. Deutsch et al. (year) also proposed that the concept of sense of place encompasses additional dimensions, such as the atmosphere (AT), which refers to the aesthetic qualities of the surrounding environmental ambience. The dimension in question is regarded as having both aesthetic and physical implications for the location. Moreover, those who possess many modes of transportation, such as the ability to drive independently, are more inclined to visit a certain destination due to the allure of its ambience.

2.3 Smart technology as enabler

(Berjozkina & Kuruville, 2023) The implementation of intelligent technologies in the context of historical tourism has the potential to significantly enhance the overall visitor experience and yield numerous benefits for both tourists and local stakeholders. The resources available for use may encompass technical elements, like interactive displays, mobile applications, digital maps, and augmented reality. Moreover, these methods can be employed to enhance the accessibility, appeal, and educational value of heritage sites for tourists, thereby augmenting tourism income and fostering sustainable growth.

ICTs, an acronym for Information and Communication Technologies, encompass several components such as technological infrastructure, connectivity, smart sensor networks, information systems, and smart applications/solutions. These elements have a significant impact on the functioning of urban and touristic settings. The smart technologies that contribute to enhancing performance in individuals and organisations within smart environments encompass Mobile Technology, Real-Time Information, Cloud Services, internet services accessible to end users, Internet of Things (IoT), Big Data and Data Mining, Virtual Reality (VR), Augmented Reality, Artificial Intelligence (AI), Near Field Communication (NFC), Radio-Frequency Identification (RFID), and Mobile Applications (Apps). Information and Communication Technologies (ICTs) have the potential to significantly impact tourist destinations, either in a profound manner (referred to as the hard effect) or in a more subtle manner (referred to as the soft effect). The hard effect of ICTs encompasses various aspects such as energy and water management, waste management, and the sustainable utilisation of natural resources, all of which are closely associated with the environmental dimension of tourism destinations. Alternatively, the gentle impact of technologies might encompass aspects like as entrepreneurship and innovation, social and human capital, and governance, which are interconnected with economic, sociocultural, and political dimensions, correspondingly. Nevertheless, several critical technologies have dual effects, simultaneously impacting health and safety considerations.

According to recent research conducted by Gani et al. (2023), the tourism industry is currently undergoing a significant shift known as Tourism 4.0. This change is characterised by the integration of technology-driven tourism with highly interconnected digital and physical platforms, as highlighted by Stylos et al. (2021) and Stankov and Gretzel (2020). According to Pencarelli (2020), Tourism 4.0 refers to the capacity of tourism

technology to enable interactivity, virtual experiences, dispersion of activities, real-time data gathering and operations, service orientation, and human engagement. The integration of personalization (Van and Hieu, 2020), information accuracy (Pencarelli, 2020), security (Barbery-Montoya et al., 2020), and service automation (Stankov and Gretzel, 2020) facilitates the transition from traditional user-experienced-based tourism to a dynamic and hybrid context. Smart tourism technologies (STTs) encompass various technological advancements that facilitate the integration, coordination, and utilisation of smart technologies to enhance the well-being of tourists. These technologies include Internet of Things (IoT) (Wang et al., 2020), near field communication (NFC) (Basili et al., 2014), real-time sensors (Novera et al., 2022), smartphones (Xiang et al., 2021), mobile apps (Dorcic et al., 2019), interconnected devices (Dorcic et al., 2019), beacons (Gretzel, 2019), and the incorporation of Information and Communication Technologies (ICTs) into tangible infrastructures constitutes a fundamental aspect of Smart Transportation Technologies (STTs) (Kelly and Lawlor, 2019). According to No and Kim (2015), it is argued that STTs heavily depend on significant personalization, which is considered a crucial factor in facilitating tourists' search for customised information, trip planning, and track sharing. In addition to the need for personalised experiences, travellers often prioritise the assurance of security when considering the selection of their chosen tourism service providers (STTs). Security refers to the degree to which STTs exhibit reliability in safeguarding the confidential information of visitors (No and Kim, 2015).

The provision of precise and reliable information to travellers is a fundamental necessity in the field of Sustainable Tourism and Travel (STTs) (Tavitiyaman et al., 2022). In the era of tourism 4.0, automation has emerged as a significant determinant in the tourism industry. It is no longer viable to rely solely on human hospitality workers, necessitating a shift towards a more comprehensive use of technological advancements (Ivanov et al., 2017). According to Hamid et al. (2021), Short-Term Training Programmes (STTs) play a crucial role in contributing to the economic, social, and cultural development of a nation, particularly in the domains of marketing and industry. According to Hinson and Boateng (2007), it is suggested that STTs have the potential to enhance the visitor experience by offering comprehensive information pertaining to various aspects such as lodging options, travel packages, transit facilities, service availability, delivery procedures, and other important services. In contemporary times, there has been a significant focus on the notion of psychological well-being within the context of technology-driven tourism (Vada et al., 2019). According to Pyke et al. (2016), tourists exhibit a preference for a congenial and health-conscious way of life when embarking on journeys to unfamiliar locations, often relying on assistive technology. According to Zhang and Zhang (2022), individuals who engage in tourism typically seek out destinations that offer opportunities for relaxation and the enjoyment of leisure activities, with the intention of alleviating mental stress. Psychological well-being encompasses the integration of positive affective emotions, as viewed from a hedonic perspective, along with effectiveness in both personal and social domains of life (Roy et al., 2021). According to Lee et al. (2018), the total satisfaction of visitors is ultimately

affected by the influence of contentment, which is characterised by intelligent services and travel experiences, on their psychological well-being.

2.4 Focusing on Sustainability, locality and inclusion

Some scholars mentioned that sustainability often becomes gimmick and under presented in smart tourism while in fact it is an important requirement to be met in today's tourism development, on the other hand (Bhuiyan et al., 2022), (El Archi et al., 2023) suggest that technology in STD can be used to promote sustainability by obliging the smart ecosystem practicing sustainability through sustainable co creation (Bhuiyan et al., 2022), applying blockchain technology to ensure and trace sustainability through smart contracts and peer to peer transparency (Pranita et al., 2023). New approach and innovation in the technology adoption should also be implemented.

(Angelidou et al., 2017) (Angelidou & Stylianidis, 2020) has raised awareness of smart destination developer to consider cultural heritage as part of smart destination development. Similar notion also mentioned by (Patel & Goyena, 2019) that smart cities should capitalize on local strengths and give prominence to local culture and traditions and provides a handful of solutions to this end. Patel & Goyana also argue that local strength should be judged within cultural contexts which they belong, especially local values and their authenticity, especially as the context of authenticity and integrity cannot be standardized definition but antagonistic tradition in heritage conservation especially in case of Asia coexist. (Buonincontri & Marasco, 2017) proposed that more comprehensive application and role of smart technologies especially in heritage and local experiences should be treated and derived from an integrated multi stage and multi dimensional analysis than from the perspective of digital technology alone.

(Andres Coca-Stefaniak, J., & Seisdedos, 2020) stated that contemporary interpretations of the smart tourism concept are increasingly evolving beyond initial - somewhat simplistic - technology-centred and rather homogenising approaches towards a focus on improving the quality of life of residents and communities (Albino, 2015), to become new smart destination built in specific patterns of place-making with a focus on attracting not only highly skilled and talented resident and the creative class but also include local communities through an ecosystem approach (Boes et al., 2016). In fact, this model still lack in social inclusion especially in rural areas where local people's digital literacy are low and performing traditional way of small businesses that are not included in the ecosystem. Thus, a new approach to local adaption and redefinition of smart concept is needed to ensure local social inclusion.

3 Methodology

The methodology to propose new generation post smart tourism destination model is based on qualitative research in two stages of interpretation. The first stage, we use VOSViewer to identify novel indicators and new trends in smart tourism research. From here we would obtain key words that can be analyzed as novel indicators for



Figure 2 Focus research on STDs in the period of 2000 to 2023

From the algorithm of VOS Viewer, we can see the outer and small circles which means the potential novel research in STDs are post STDs, safety, climate change, conservation, society, psychological safety, tourist village, tourist intention and revisit intention, heritage site, sense, social capital, and sustainable tourism development. The keywords then deducted through categorization and cluster into group of keywords in the same characteristics.

The results show that post STD concept will be one interesting topic of STD in near future, where the main idea is to ensure safety and security of data, be more humanistic, focus on sustainability, local value and basic tourism attributes, The post or new generation of STD will need to revisit intention especially tourist intention, respect social capital and inclusive.

This findings actually support the idea of .. to educate tourists so that tourists become smart tourists. Sustainability aspects including global warming, conservation and sustainable development will also be a very crucial aspects in tourism development

4.2 Impact of digital technology, sustainability and locality / tourism unique resources in various destination

4.2.1. Conservation based STD in Tanjung Bunga, Samosir, Indonesia

smart tourism requires the creation and cooperation of ‘smart tourists’ in their purer manifestations, as informed and empowered individuals constitutionally open to data sharing with other stakeholders and to using smart technologies not just to enhance but also co-create highly personalized and memorable tourist experiences.

4.2.2. Culture based STD in Kenderan, Gianyar, Bali, Indonesia

Kenderan Village, located at Tegalalang District, Gianyar Regency, Bali Province has superior village potential in agriculture, cultural arts, religious tradition that has become the local people's way of living that full of traditional festivities which can be promoted as interesting tourist's attraction. The people of Kenderan also practice Tri Hita Karana, their philosophical beliefs that live should be balanced, respecting environment, other people and surroundings that can be developed as basic modality to a sustainability practice, especially circular economy. Considering this, the village through intensive coaching, wants to differentiate itself as a living culture practicing circular economy as their way of living. The temple becomes people's central activities on preserving Hindunese tradition and sustainable practice through circular economy adoption starting on how they manage offerings' waste, initiating the utilization of solar cell as renewable energy for the temple's lightings, and minimizing the use of plastics and unsustainable materials.

Empirical research on people's perspectives then carried out to create smart tourism village model. The model shows that living creative festivals as local tourism resources, digital competence and circular economy practices are the building blocks of smart tourist village. From the perspectives of smart tourist village, digital competence influences smart tourism village greater than locality and sustainable practice, while locality or unique tourism resources have significant impact to the development of smart tourism village as seen in Figure 3 below.

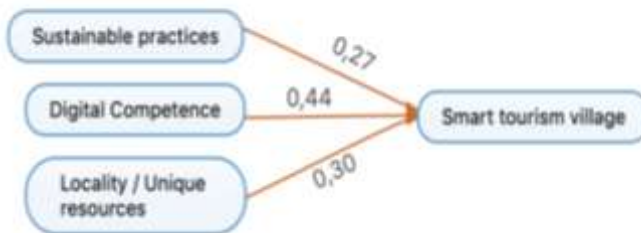


Figure 3 The impact of local resources and digital competence on smart tourist village

4.2.3. Blue economy-based STD in Seribu Island, Jakarta, Indonesia

Seribu islands, group of islands as part of Jakarta province of Indonesia, is the poorest area in Jakarta with the lowest digital skills rate. It depends on ocean economy especially marine and island tourism, fisheries, and aquaculture. As the islands are separated between one and another, high technological connectivity such as blockchain technology-based platform can be utilized to improve collaboration and efficient management of the islands and its blue economy as it is a decentralized, peer-to-peer, traceable smart contracts that can be monitored and controlled by the blue economy ecosystem.

The result of research to blue economy value chains in Seribu islands shows that blue economy (Figure 4), as the islands’ local resources, accounts for the most significant factor to smart islands development. Blue economy’s impact is even greater from digital skills and blockchain technology adoption’s combined together. In this case, local resources manage in sustainable approach must become the focus of development while technological aspects are the enabler of smart islands.

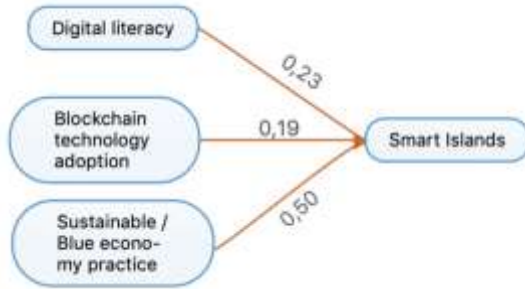


Figure 3 The impact of local resource and digital technology on smart islands

4.2.4. *Urban based Smart Tourism City in Jakarta, Indonesia*

As capital and central of political, social, and economic activities, Jakarta has implemented smart city and attracted not only tourists but also interregional visitors. Thus, Jakarta intends to improve its urban attractiveness and livability to become smart tourism city and implements more than just technological focus of STD. By doing so, factors and indicators of smart tourism city are identified and grouped into a dataset of smart urban tourism city. From the dataset, it is obtained that the city’s core resources, such as attraction, amenities, tourism packages and activities are the most important factors compared with accessibility, sustainability, and technological adoption (see Table 1 below). Consequently, to be successful on smart tourism city, Jakarta must focus on the city’s attractiveness as the reason why tourists visit Jakarta.

Table 1 Factors and indicators of smart tourism city

| NO | DESCRIPTION | INDICATORS |
|----|-------------------|---------------|
| 1 | Attractiveness | 29 indicators |
| 2 | Accessibility | 6 indicators |
| 3 | Digital readiness | 3 indicators |
| 4 | Sustainability | 2 indicators |

Based on four case studies above, we can deduct that developing STD, technology adoption and skills are enabler and tools to make destination accessible and connect efficiently to customers and other actors in ecosystem. Tourism destination should focus on its core resources to make it attractive and unique, so it can have comparative advantages. Sustainable practices should be implemented to preserve and ensure tourism core resources quality.

4.3 Post Smart Tourism Destination Model

From smart tourism destination's indicators and factors identified from VOSViewer and case studies, post smart tourism destination as Coca-Stefaniak mentioned as new generation of STDs, tourism core resources that shape locality and sense of place are still the most important aspects to consider in tourism development, whether it a smart one or not. Therefore, there is a need to redefine the smart concept that fit into tourism destination development, as an approach to make destination has sense of place with its individual unique resources and thematic differentiation, so that the destination could provide authentic, valuable, rare, hard to imitate and unsubstituted experiences to the tourists while provide good quality of life to local society. The new generation of STD utilizes various technologies as enablers to make the destination able to manage and develop ultimate tourist experience effectively, efficiently and sustainable.

The new generation of STD or post STD can be seen in Figure 5 below.

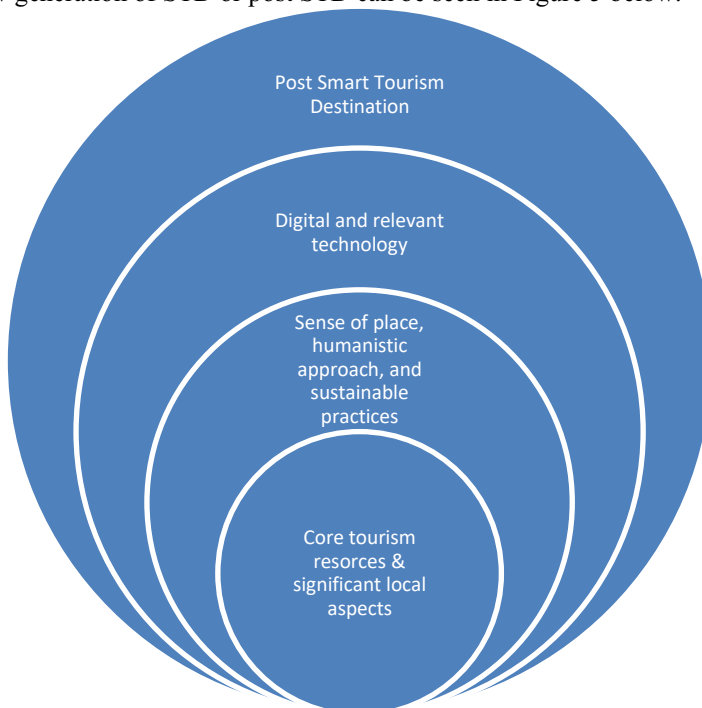


Figure 5. Post Smart Tourism Model

Figure 5 above describes that successful new generation of smart tourism destination must have significant core resources as tourism attractors. It should show a strong local value and uniqueness either it is from its natural, cultural heritage or other thematic man-made resources. To ensure good differentiation, make it unique and has sense of place, destination planners should create interaction, emphasis on identification of

comparative advantages, and apply sustainable practice that include local communities from the very beginning of tourism development, while technologies are enablers to make tourists have easier access in consuming and taking active part to co create the experiences.

5 Conclusion

Tourism destination should focus on its core resources to make it attractive and unique, so it can have comparative advantages. Sustainable practices should be implemented to preserve and ensure tourism core resources quality. Tourism destination development is an approach to make destination has sense of place with its individual unique resources and thematic differentiation, so that the destination could provide authentic, valuable, rare, hard to imitate and unsubstituted experiences to the tourists while provide good quality of life to local society. The new generation of STD utilizes various technologies as enablers to make the destination able to manage and develop ultimate tourist experience effectively, efficiently and sustainably.

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