

SMART TOURISM DESTINATIONS INFLUENCE A TOURIST'S SATISFACTION AND INTENTION TO REVISIT

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ABSTRACT

Smart Tourism Destinations (STD) are becoming significantly important for providing personalized tourism products and hospitality services via a digital platform to enhance a high-value experience and gain a competitive advantage for business. The objective of this study is to study the impact of smart tourism destinations that affect the revisit intentions during the COVID 19 pandemic in Thailand. Data was collected from 498 samples and a Structural Equation Model (SEM) was adopted. The findings supported the revisiting behavioral intention model which indicated that the overall satisfaction of tourist is reflected in the use of STD. The results found that the use of STD, travel experience, satisfaction, and revisiting intention are positively significant. The perceptions of smart tourism on revisiting intentions are significant. A significant relationship was observed between STD indirectly affecting travel experience (0.954), travel experience directly affecting satisfaction (0.870), satisfaction directly affecting revisiting intention (0.731), travel experience directly affecting revisiting intention (0.281) and finally, travel experience in-directed (0.248). The Relative Chi-square (χ^2/df) of 1.247 indicates that the model is suitable. The Comparative Fit Index (CFI) is 0.997, the Goodness Fit Index (GFI) is 0.956 and the model based on the research hypothesis is consistent with the empirical data. The Root Mean Square Error of Approximation (RMSEA) is 0.032.

Keywords: Smart Tourism Destination (STD), Tourism Experience, Tourism Satisfaction, Behavior Intention, Revisiting

INTRODUCTION

Tourism is becoming a significant industry which is a crucial component of the social and economic driving forces of an overabundance of countries as it generates job opening and business opportunity worldwide (Jermstiparsert, Joemsittiprasert & Phonwattana, 2019; Kontoginni & Alepis, 2020; Brandt, Bendler & Neumann, 2017; Chienwattanasook & Jermstiparsert, 2019; Saengchai, Joemsittiprasert & Jermstiparsert, 2019). The tourism industry contributes to the high economic growth and has been pragmatic in several countries especially in Thailand (Jermstiparsert & Chankoson, 2019; Suanpang & Jamjuntr, 2021; Chienwattanasook & Jermstiparsert, 2019; Saengchai, Joemsittiprasert & Jermstiparsert, 2019). Thailand is one of the top tourist countries in the world having beautiful natural re-sources, historical and high-value hospitality services (Suanpang & Jamjuntr, 2021; Suanpanget et al., 2021a; Suanpanget et al., 2021b). The tourism industry is successful and one of the major economic contributors in Thailand estimated to directly contribute 5.56 per cent of GDP before the crisis of the COVID-19 epidemic (Suanpang & Jamjuntr, 2021; Suanpanget et al., 2021a; Suanpanget et al., 2021b).

Due to the COVID-19 pandemic in Thailand, the tourism industry was in a downturn; it prohibited international arrivals and in lockdown, people had to stay at home (Suanpanget et al., 2021a; Suanpang et al., 2021b). This circumstance had a direct effect on the tourism industry and business sector who wanted to develop safety trust and build confidence among tourists. The tourists consider their health and safety, which was considerably increased, thus creating a new normal way (Suanpang & Jamjuntr, 2021; Suanpanget et al., 2021b). Meanwhile, the tourist's behavior changed by selecting short trips, driving to unseen tourist attractions, less crowded and more personal travel (TNN 16, 2021). Tourist behavior is changing by using the smart tourism system to search for information for travel planning, avoiding crowded places and outdoor activities, increasing, and accelerating the use of digital transformation (Bamberg et al., 2007; OECD, 2020). Besides the tourism business sector is adopted a strategy to increase the value of spending per person, consider health and safety leading to a revisit intention in the future. Several business sectors and local government have promoted a new concept of 'Smart & Safe Destination' to reboot tourism in several cities in Thailand, especially in Rayong province which a new high tech industry zone in the Eastern Economic Corridor (EEC). This provides a new perception of 'Smart Tourism Destination' (STD) to create a new travel experience to support the new and the next generation of normal tourism which is expected to eventually recover and continue growing (Bamberg et al., 2007; Kiatkawsin, Sutherland & Ki, 2020). With the advance of information technology, the concept of STD uses ICTs to promote tourism attraction by integrating highlights of three forms of, Cloud Computing, Internet of Thing (IoT), and End-User Internet Service System (Tyan, Yagüe & Guevara-Plaza, 2020; Zhang, Li & Liu, 2012). STD provides a technological platform through which all tourism data can be exchanged through the system (Tyan, Yagüe & Guevara-Plaza, 2020). The related technologies can improve the travel experience and increment the competitiveness of the destination by providing personalized products and hospitality services of the destination (Buhalis & Amaranggana, 2015). The STD used to enhance the tourism experience and improve the effectiveness of tourism resources towards both tourist's satisfaction and destination competitiveness (Tyan, Yagüe & Guevara-Plaza, 2020; Buhalis & Amaranggana, 2015). To bridge in the gap, STD is a new tool for promoting tourism and enclosing a tourist's satisfaction and revisit intention during the COVID 19 pandemic. The objective of this study is to study the impact of smart tourism destinations that affect the revisit intention during the COVID 19 pandemic in Thailand.

LITERATURE REVIEW

Smart Tourism Destination (STD)

Smart tourism phenomena is a new approach utilizing an innovation with the advance of Information and Communication Technology (ICTs) over the tourism destination, travelers, and tourism business (Tyan, Yagüe & Guevara-Plaza, 2020; Koo, Park & Lee, 2017). From the review literature, it was found that many research studies focused attention to the Smart Tourism Destination (STD) domain (Tyan, Yagüe & Guevara-Plaza, 2020) especially the studies about enhancing tourism's experience through personalization of services (Tyan, Yagüe & Guevara-Plaza, 2020; Buhalis & Amaranggana, 2015), develop the conceptual model for STD (Tyan, Yagüe & Guevara-Plaza, 2020; Koo et al., 2016) and examined the effected of STD strategy and solution for destination management to create a tourism experience (Tyan, Yagüe & Guevara-Plaza, 2020; Femenia-Serra & Ivars-Baidal, 2018).

The STD definition was clarified as the concept of smart cities as applied to tourist centers (Buhalis & Amaranggana, 2015). Moreover, the STD concept is the destination that applies different ICTs when developing and producing tourism processes (Tyan, Yagüe & Guevara-Plaza,

2020) and connecting different stakeholders in a destination through ICTs (Tyan, Yagüe & Guevara-Plaza, 2020; Buhalis & Amaranggana, 2015). Furthermore, (Boes, Buhalis & Inversini, 2015). Defines STD as the technologies that create value, pleasure and experience for tourist as well as provide profits for the destination. Additionally, many works of literature characterize STD as the destination that collects data to understand tourist's needs and behavior to provide a better experience and services in real-time through the platform (Tyan, Yagüe & Guevara-Plaza, 2020; Xiang & Fesenmaier, 2017; Jasrotia & Gangotia, 2018).

STD in Thailand: A Case Study

Apart from the COVID 19 pandemic circumstance, it leads to design the concept of STD that will be implemented as the prototype in Rayong province (Suanpang & Jamjuntr, 2021; Suanpanget et al., 2021a; Suanpanget et al., 2021b). STD is designed by equipping with the relevant technologies and implementing the appropriate tourism applications within the Smart City component (Suanpang & Jamjuntr, 2021; Suanpanget et al., 2021a; Suanpanget et al., 2021b). The design of the STD case study in Thailand, tourist for search information for travel decisions and planning *via* the application and information from social networks, make the reservation *via* an online platform, arrival *via* an online check-in in the smart hotel system, tourist gain tourism experience from using GIS, AR, QR Code in the tourist attraction and finally review and send feedback from their tourism experience and the intention of revisiting on social media. However, several actions implemented by the Rayong Smart Tourism Destination have been analyzed but this action, which influences the tourism experience, still need to be further evaluated from the international tourist point of view.



FIGURE 1
THE CONCEPT DESIGN STD CASE STUDY: THAILAND

STD Eco-System

The STD ecosystem is the most comprehensive way to describe the foundation of smart tourism (Gajdošík, 2018). The ecosystem of STD is composed of four elements: (1) digital technology, (2) consumers (residents), (3) business (tourism business, other business) and (4) tourism destination (DMO, government) (Gajdošík, 2018; Moore, 1993). The STD ecosystem uses three technological components: could compute Internet of Things (IoT), and the end-user Internet services system (Gajdošík, 2018; Zhang, Li & Liu, 2012). Cloud computing store tourism data on the cloud allowing access data from the Internet in real-time. The Internet of Things (IoT) allows the connection of objects and to collect, process data from the devices with the minimum human involvement. Lastly, the end-user internet service system comprises all the hardware and all

application to other cloud computing and IoTs. The additional technologies that apply in STD including the destination application, augmented and virtual reality, sensors, NFC, QR code, ubiquitous connectivity through Wi-Fi, social network and chatbot (Suanpang & Jamjuntr, 2021; Gajdošik, 2018; Zhang, Li & Liu, 2012). The STD provides intelligent support based on real-time and comprehensive and grate value tourist experience and a better quality of life for the residents in the tourist attraction area (Suanpang & Jamjuntr, 2021; Gajdošik, 2018; Huang et al., 2017).

H1: Perceiving STD positives influence travel experience.

STD Enhancing Tourism Experience

The STD enhances tourism experience through information technology by providing real-time information about destinations and hospitality services in the planning phase, enhanced access to real-time information to assist tourists to explore the destinations during the trip and engagement to relive the experience by proving ancestry feedback after the trip (Koo et al., 2016; Moore, 1993). STD enhanced tourism experience is expected to provide personalization services, providing information based on user profile to support their travel planning (Tyan, Yagüe & Guevara-Plaza, 2020; Koo, Park & Lee, 2017). Moreover, STD can use blockchain technology for such guest services as tracking tourists, tracking luggage, managing lost luggage, providing fast check-in procedures, and facilitating travel insurance, therefore greatly enhancing the tourism experience (Tyan, Yagüe & Guevara-Plaza, 2020; Dogru, Mody & Leonardi, 2018).

H2: Travel experience positive influences overall satisfaction.

STD Satisfaction

Tourist satisfaction involves several aspects, Oliver (1993) defined tourist satisfaction as post-consumption assessment of a particular service and product. Moreover, the expectancy disconfirmation model measured customer satisfaction by comparison between the expectation and perception of customer (Oliver, 1993). This model comprised of expectation, perceived performance, performance, disconfirmation, and satisfaction (Oliver, 1993). Meanwhile, previous studies have suggested a linkage between the perceptions of the tourist towards the selection of the destination (Tyan, Yagüe & Guevara-Plaza, 2020; Oliver, 1993). Therefore, tourist satisfaction plays a significantly important role in the intention of a tourist to revisit or recommend a destination to other people (Tyan, Yagüe & Guevara-Plaza, 2020). Satisfaction adopts a set of identities that the destination attributes and ignores some domains (e.g., culture), many studies address common domains such as participating in decision making, tourist motives, peaceful stay, and travel activities. Finally, destination satisfaction has a direct effect and positive impact on satisfaction (Tyan, Yagüe & Guevara-Plaza, 2020; Chung & Petrick, 2013; Yu & Goulden, 2006).

H3: Travel experience positive influences revisiting intention.

STD Destination Revisiting

Destination revisiting or loyalty is a concept of tourist behavioral studies (Yu & Goulden, 2006; Dimanche & Havitz, 1995), the revisiting of the destination is the key success factor of tourism. There are two main components of revisiting behavior including attitude and behavior (Tyan, Yagüe & Guevara-Plaza, 2020; Hughes, 1991). The attitudinal refers to continue the relationship with the product or service and behavior loyalty reflects continuing tourism for the

product and services (Morais & Lin, 2010). Additionally, attitudinal demonstrates the description of tourist for their recommendation of the destination to other people or their plan to revisit the destination (Morais & Lin, 2010). Meanwhile, composite loyalty measures loyalty and represents the most comprehensive of loyalty and revisiting (Kim & Brown, 2012). The loyalty construct is measured by using 'intention to revisit' and 'willingness to recommend' (Chen & Cheng, 2012).

H4: Satisfaction positive influence revisiting intention.

Conceptual Model

The conceptual model was designed from the literature review to identify the factors that influence tourist satisfaction and revisit intention (Tyan, Yagüe & Guevara-Plaza, 2020). Many studies investigated tourist satisfaction and destination revisit by developing behavioral models of ecotourism and examining the relationship between quality, satisfaction, and revisiting (Tyan, Yagüe & Guevara-Plaza, 2020; Chi & Qu, 2008). However, many studies look at tourist expectation that helps improve the quality of the services and overall satisfaction that influence revisit and recommend the destination to other potential visitors (Tyan, Yagüe & Guevara-Plaza, 2020). The goal of this study is to validate the measures of STD and to examine the effect of travel experience, which directly affects the satisfaction and intention to revisit the destinations in Thailand (Suanpanget et al., 2021a; Suanpanget et al., 2021b). Figure 1 present the conceptual framework model.

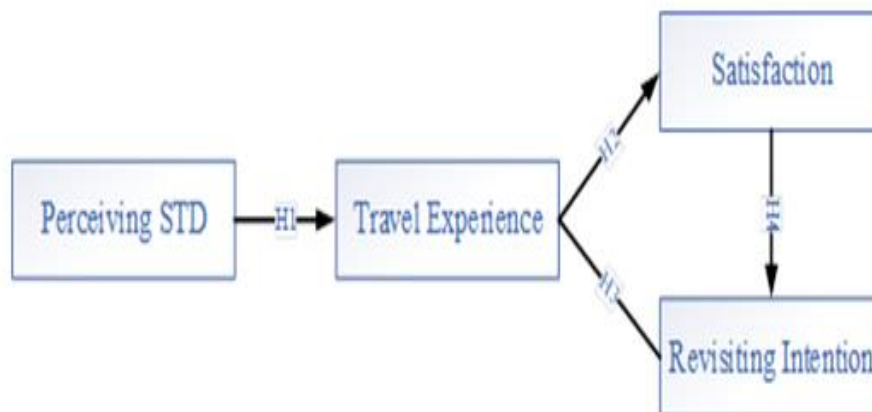


FIGURE 2
THE CONCEPTUAL MODEL

RESEARCH METHODOLOGY

The research methodology is about research design, population, sample, data collection technique, and using statistical tools for data analysis (Jermisittiparsert, Joemsittiprasert & Phonwattana, 2019). In the current study, a quantitative research approach was used which is also called the deductive approach. A study is conducted for analyzing the impact of STD that influences tourists experience and satisfaction which affect their revisit intention.

Population and Sample

The population was domestic's tourists in Thailand. The non-probability sampling technique like convenience was used. The sample size more than 400 sample based on was 400 based on Cochran (1977) with a confidence level of 95% ($\alpha=0.05$), however, to increase the reliability of the study the researcher collected data from a sample size of 498 samples.

Demographic of the Sample

The study of the sample about demographic found that, most of the tourists were females 65.141% and 38.46% were males. Most were aged between 25-34 40.74%, were employees of companies/ enterprise 45.97%, having a bachelor's degree 67.32%, with an average monthly income of between 0,001-15,000-baht, 25.05%, respectively. Tourists prefer to travel with their families/lovers the most 57.73%, with average rest days per trip, about 2 nights each time 54.68%, prefer resort-type accommodation 49.24%, with the average accommodation price per night for most tourists, about 1,000 - 1,500 baht, 34.86%, respectively. Tourist's opinion that the COVID 19 epidemic has made them more concerned about travel safety. The mean was at the highest level ($\bar{X}=4.79$, $SD=0.56$). The second place was that the epidemic caused fewer tourists to travel. The average was at the highest level ($\bar{X}=4.67$, $SD=0.68$). The third place was that the epidemic caused tourists to avoid travelling during festivals and crowded tourist attractions. The mean was at the highest level ($\bar{X}=4.67$, $SD=0.71$), respectively. Finally, tourists' confidence in the cleanliness measures of restaurants, accommodation, and tourist attractions was at a high level ($\bar{X}=3.72$, $SD=0.99$), restaurant services, accommodation, and tourist attractions were averaged at a high level ($\bar{X}=3.69$, $SD=0.96$), high level ($\bar{X}=3.62$, $SD=1.04$) respectively.

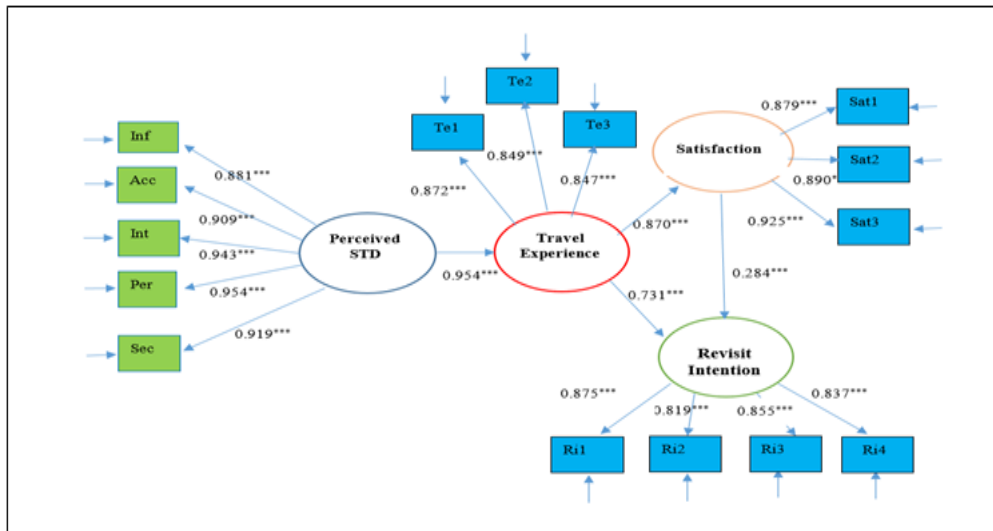
Questionnaires

Based on the research conceptual framework and the literature review, 9 closed questions that related to the demographic of the sample were used. The second section of the questionnaire about tourism behavior during COVID 19 had 6 closed questions. The third section about reliability & trust of travel during COVID 19 had 6 closed questions. The fourth section about using STD had 27 closed questions, consisting of tourism experience 3 closed questions, satisfaction 3 closed questions and revisiting intention 4 closed questions. The questions used the Likert 5 scale ranging from 5=strongly agree, 4=agree, 3=moderate, 2=disagree, 1=strongly disagree. The reliability of the measures was tested using Cronbach's alpha=0.98. Data were analyzed using SPSS for descriptive statistics. An Exploratory Factor Analysis (EFA) and Confirmatory Factory Analysis (CFA) were run by using LISREL 9.0. The questionnaires were collected using an online assessment. 498 sample size was selected and is enough to analyses the impact of variables.

RESEARCH RESULTS

Measurement Model

The analysis of the causal relationship model for the development of the STD to build experience and confidence in tourism after COVID-19 consisted of 4 latent variables, namely Perceived Smart, Travel Experience, Satisfaction and Revisit Intention, with 15 observable variables. Variables show the relationship of the observed variables.



**FIGURE 3
STRUCTURAL MODEL**

The results of the causal relationship model analysis of the development of the STD to build experience and confidence in tourism after COVID-19 revealed that Perceived STD had a direct positive influence on the Travel Experience with a magnitude of 0.954. The Travel Experience has a direct positive influence on Satisfaction with an influence size of 0.870. Satisfaction had a direct positive influence on the Revisit Intention, with an influence size of 0.731. Travel Experience had a direct positive influence on Revisit Intention with a magnitude of 0.281, and Travel Experience had an indirect influence on Revisit Intention *via* the Satisfaction variable with an influence size of 0.247.

Considering each aspect, it turns out that the Perceived Smart was the highest component.

Considering each aspect, it turns out that the Perceived STD with the highest component weight is per, followed by Int and Sec, respectively. All 3 aspects can explain the variation of Perceived STD, 91.10 %, 88.90%, and 84.50%, respectively. Travel Experience the aspect with the highest weight component was te1, followed by te2 and te3, respectively. All 3 aspects could explain the variation of the travel experience, 76.10%, 72.10%, and 71.80%, respectively. The satisfaction with the highest component weight was Sat3, followed by Sat2 and Sat1, respectively. All three aspects accounted for 96.10 %, 79.10%, and 77.20% variations in Satisfaction, respectively. Revisit Intention the aspect with the highest component weight is Ri1, followed by Ri3 and Ri4 respectively. All 3 aspects can describe the variation of the Revisit Intention as 76.50%, 73.10% and 70.10%, respectively. Perceived Smart can explain 90.09% variation in Travel Experience. Travel Experience can explain 75.70% variation in Satisfaction. Travel Experience and Satisfaction explain 97.50% variation in Revisit Intention.

**Table 1
DIRECT IMPACT ASSESSMENT RESULT**

Latent	Perceived STD			Travel Experience			Satisfaction		
	TE	DE	IE	TE	DE	IE	TE	DE	IE
Travel Experience	0.954*** (0.000)	0.954** (0.000)	-	-	-	-	-	-	-
Satisfaction	0.829*** (0.000)	-	0.829*** (0.000)	0.870*** (0.000)	0.870*** (0.000)	-	-	-	-
Revisit	0.932***	-	0.932***	0.978***	0.731***	0.247***	0.284***	0.284***	-

Intention	(0.000)	-	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	-
*** <i>p-value</i> <0.001 Direct effect (Total Effects:TE) Direct effect (Direct Effects:DE) Indirect effect (Indirec Effects:IE)									

Model Conformity Index Validation Results Point out that /df.=1.247 (less than 2) *p*-value=0.091, Goodness of Fit Index (GFI)=0.972, Adjusted Goodness of Fit Index (AGFI)=0.956, Comparative Fit Index (CFI)=0.997, Normed Fit Index (NFI)=0.983 (more than 0.95) and Root Mean Square Residual (RMR)=0.007, Root Mean Square Error Ap-proximation (RMSEA)=0.032 (less than 0.05) All indices are appropriate (Schumacker & Lomax, 2010).

Good of Fit Test	Criteria	Value	Result
χ^2 /df	>2.00	1.247	Pass
<i>p-value</i>	< 0.05	0.091	Pass
GFI	<0.95	0.972	Pass
AGFI	<0.95	0.956	Pass
CFI	<0.95	0.997	Pass
NFI	<0.95	0.983	Pass
RMR	>0.05	0.007	Pass
RMSEA	>0.05	0.032	Pass

DISCUSSION AND CONCLUSION

The relationship between perceiving STD and tourist satisfaction has attracted increasing research interest, few studies have empirically examined how overall revisiting behavior and overall satisfaction affect the willingness of the tourists to revisit and recommend a specific destination to other potential tourists (Suanpanget et al., 2021a; Suanpanget et al., 2021b; Tyan, Yagüe & Guevara-Plaza, 2020; Koo, Park & Lee, 2017).

This study evaluates the components of STD perceiving to affect the revisiting intention as well as the factors that affect tourist satisfaction and destination revisiting in the EEC zone in Thailand. Based on the tourist behavior model, this study explored the relationship between STD perceiving, tourism experience, satisfaction, and loyalty through revisiting intention behavior by using exploratory and confirmatory factor analysis techniques. The research findings inform us that perceiving STD component (informative, accessibility, personalization, security) that influence travel experience which affects tourist satisfaction and behavioral revisiting intention. These correlate with the study of Gartner (1994) the positive result of STD in tourist's mind can lead to the positioning of the destination to gain a competitive edge in the comparison with other well know world-class tourism destinations. On the other hand, the result of the structural model, directly and indirectly, affects the relationship among STD perceiving, tourism experience, satisfaction, and revisiting intention. While research has outlined the lack of development of conceptual pathways, the main study examines factors contributing to tourist loyalty (Tyan, Yagüe & Guevara-Plaza, 2020). Therefore, the factors that influence the revisiting intention such as values, attitudes, needs, and behavior of tourists should be emphasized. Finally, a successful tourism industry should enhance the quality of services and provide a safe and attractive environment for potential tourist especially during the COVID 19 pandemic. This empirical study could help the tourism stakeholders to design a positive image of tourist destinations, leading to competitive advantage and sustainable tourism development.

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