Enhancing The Experience Of Tourists Through Smart Tourism In Vietnam

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Abstract:

The rapid growth of the tourism industry also brings new challenges for many countries, especially for developing countries with the potential for ecotourism development. The destination needs to have a strategy that covers the entire spectrum of tourism activities, from visitor experience to security, as well as market promotion and local cultural sensitivities. In that context, a new version of destination emerged, called smart tourism destination (STD). The explosion of tourism requires destinations to redefine their role in the co-creation of value. Smart tourism destination (STD) is considered an effective solution to enhance the visitor experience and enhance visitor satisfaction. However, bringing intelligence into tourism requires dynamic interaction between stakeholders in the ecotourism system. The article is intended to explain smart tourism and provide insight to destination managers and policymakers on how they can use innovative technologies in STDs to improve the experience and co-create value. The article also offers strategic solutions for local leaders and managers with a strategic view of the STD digitalization strategy. In addition, improving the quality of complementary services to enhance the tourist's experience when coming to Vietnam.

Keywords: Smart tourism, tourist experience, tourism Marketing.

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I. INTRODUCTION

Tourism is a smokeless industry that plays an important role in the economy, contributing more than 9% to GDP each year. The development strategy of Vietnam's tourism to 2025, with a vision to 2030, has set the goal of developing Vietnam's tourism to become a spearhead economic sector, strongly promoting the development of other industries and fields and many localities; at the same time, maximize tourism's contribution to the economy, create jobs and improve people's quality of life. Vietnam is among the top countries with very fast growth in information technology in the world, so, like previous industrial revolutions, Industry 4.0 promises to bring many benefits and great opportunities. big for Vietnam. At the same time, the industrial revolution 4.0 requires professions in society to transform in the direction of "smarter" to be able to meet the needs of society. The application of advanced technologies for the tourism industry such as artificial intelligence (AI), cloud computing, Big data, Blockchain, 3D technology, 3600, virtual reality and augmented reality (VR) technology. AR), internet of things (IoT), positioning technologies, (GIS, GPS, LBS); along with the explosion of the internet, social networks, wireless sensor networks (WSNs), and generations of mobile networks (4G, 5G), ... have contributed to changing the face of the tourism industry, Tourism activities are increasingly technologicalized, becoming more and more modern and smarter. Therefore, developing smart tourism is an inevitable trend, which will create a new face for Vietnam's tourism industry to catch up with the development of world tourism.

II. THE THEORY OF SMART TOURISM DESTINATION (STD)

"Smart" has become a buzzword in recent years. In essence, for something to be "smart" it needs to be able to integrate complex technologies to enable the extraction of a wide range of information that is then used to inform operations and development. product development. While the casual tourist may not be aware of what goes on behind the scenes, there can be a lot of work going on to ensure maximum productivity and competitiveness.

In the past, the concept of 'smart' was not directly associated with technology, but in today's world, it is certainly intertwined. To become "smart", destinations, attractions and other stakeholders of the tourism industry will use a variety of technological innovations and practical applications. As such, the application of technology is at the heart of the smart tourism concept.

A resident from Europe - which is considered the Capital of Smart Tourism, thinks that a smart destination is: "A destination connected with products, services, spaces, and travel experiences. and hotels through ICT-based tools. It is a healthy social environment, which can be found through the city's focus on social and human capital. Simultaneously implement innovative, intelligent solutions and promote the growth of startups and interconnectedness." To explain better, Buhalis and Amaranggana said that: "Smart tourism destinations have the following advantages: (1) New technology associated with the environment; (2) Microand macro-level responsive processes; (3) End-user devices at multiple touchpoints; and (4) Stakeholders use the platform dynamically as a nervous system of the brain.

Smart tourism destination is focused on e- tourism, here the consumers are very familiar with new technologies, and use them permanently. It contains multiple components, like reservation systems, social media, various communication and connection applications, etc. (Gretzel et al. 2015)

The concept of smart tourism destinations refers to developing destination management as a way for tourism destinations through 'digital transformation' (Buhalis & Amaranggana, 2014). As a related concept, smart tourism is described in terms of the collection and aggregation of information from tourist operators, infrastructures, and individuals relevant to a particular destination. This information is then digitized, creating a commercial, and human value for those who visit the destination with a focus on sustainability, experiences and efficiency (Chen et al., 2021; Gretzel, Sigala, et al., 2015; Um & Chung, 2021; Ye et al., 2021). Um and Chung (2021) state that smart tourism not only elevates tourism resources but also enables tourism management, improving quality of life and improving communication. Lee et al. (2021) stress that smart tourism is a holistic approach where ICTs support the marketing and delivery of tourist products and services at destinations. similarly, Baggio and Del Chiappa (2014) emphasize that a smart tourism destination employs technological infrastructures to create a digital environment (ie ecosystem). This digital environment is discussed in scholarly literature as essential for a destination to become more effective in terms of knowledge creation and sharing, as well as enhanced tourist experiences (Buhalis & Amaranggana, 2014). Yet, as the number of stakeholders, and destinations become more complex, what causes decision-making processes to be complex and difficult to manage (Pan et al., 2021).

III. CURRENT STATUS OF INFORMATION TECHNOLOGY APPLICATION AND DIGITAL TRANSFORMATION TOWARD SMART TOURISM IN VIETNAM

According to the Digital Vietnam 2020 report, there are 68.17 million Internet users in Vietnam, an increase of 6.2 million (more than 10%) from 2019 to 2020. The Internet access rate in Vietnam will be at 70% in 2020. In which, the amount spent on the consumer category "Tourism - including accommodation" in 2019 increased by 12% compared to 2018.

According to the Vietnam National Administration of Tourism, in 2019, the tourism industry contributed over 9.2% to the country's GDP; created 2.9 million jobs, including 927 thousand direct jobs. Generally, in the period 2015-2019, the tourism industry achieved a high growth rate of 22.7%. The achievements and efforts of Vietnam's tourism have been highly appreciated by the world, with the World Tourism Organization (UNTWO) ranking Vietnam sixth in the top 10 countries with the fastest tourism growth in the world. According to the 2019 Global Tourism Competitiveness Report of the World Economic Forum (WEF), in the period 2015-2019, Vietnam's tourism competitiveness increased by 12 places, from 75/141 economies last year. 2015 to 67/136 in 2017 and 63/140 in 2019. The development of Vietnam's tourism industry is the result of the implementation of guidelines and policies of the Party and State, especially Resolution No. 08– NQ/TW dated 16/01/2017 of the Politburo on developing tourism into a spearhead economic sector.

However, in 2020, the Covid-19 pandemic quickly "frozen" the world tourism industry and Vietnam's tourism is no exception to that influence. Tourism is one of the industries most directly and severely affected by the Covid-19 pandemic. In such circumstances, Vietnam's tourism industry must make efforts to actively adapt and restore operations in the new situation. In parallel with the shift to take the domestic market as a spearhead to revive the tourism industry, Vietnam's tourism has quickly grasped the digital transformation, continuing to accelerate the development of smart tourism to quickly recover. and catch up with the general development trend of world tourism.

3.1 Achievements of the smart tourism industry

Over the years, recognizing the role and importance of smart tourism in contributing to improving the effectiveness of promotion and promotion through promoting digital tourism marketing; increasing the attractiveness of tourism products, improving the quality of tourists' experiences at the destination, improving the quality of tourism services, improve the efficiency of state management of tourism through the development of tourism applications. management of tourist destinations, businesses, travel activities, and accommodation establishments; supporting tourism businesses... Vietnam National Administration of Tourism,

localities and businesses have had strategies for digital transformation and application of information technology to promote smart tourism in Vietnam.

In order to improve the effectiveness of tourism promotion and promotion in Vietnam, the Vietnam National Administration of Tourism has invested in developing technology applications in marketing and ecommerce and is ready to cooperate with businesses with ideas. Innovative technology projects to benefit the tourism industry. At the same time, this agency also actively sponsors projects and programs to apply technology in tourism promotion and promotion. Some projects can be mentioned such as implementing the application of 360-degree photo technology in tourism, the national tourism promotion programs "Super Selfie" and #WhyVietNam through the widespread spread of social networks and online marketing to promote the image of Vietnam's tourist destinations to international friends. In October 2018, the Vietnam National Administration of Tourism signed a cooperation agreement with the National Television Station (VTV) to deploy the Smart Tourism Portal - VTV travel (dulich.vtv.vn) to provide content., comprehensive information to users, bringing smart travel experiences in the digital age 4.0, thereby contributing to improving the quality of tourism services. Through VTV travel, visitors will have access to a huge database of destinations; videos introducing and promoting the unique characteristics of each region and locality; be consulted with geographical information based on the feature of automatically determining the location through positioning; Listen to schedule advice, directions, suggestions for places to eat, restaurants, hotels, outstanding events through the automatic content calling function. At the same time, visitors will be supported to resolve complaints through direct connection with the authorities to reflect when necessary.

In addition, in June 2019 with the consent and sponsorship of the Vietnam National Administration of Tourism, TikTok - the world's leading short video platform, together with Tourism Magazine officially launched the program "Promoting Vietnam's tourism". Nam by video tool, #Hel-loVietnam program, with the companionship of Vietnam Cab Television Corporation (VTVCab). The main goal of the #HelloVietnam program is to create tourism trends, community interaction with destinations, and tourism products, creating curiosity for visitors to learn, explore, and experience. about products, services, and destinations in Vietnam; At the same time, tourists are encouraged to record videos during their travel journey in response to trends and personalities on the basis of using available and diverse features, filters, and background music on the TikTok application. This is an activity to promote and promote Vietnam's tourism to develop and diversify content, honoring the creativity of Vietnamese people.

In September 2019, the Vietnam National Administration of Tourism and the Department of E-commerce and Digital Economy (Ministry of Industry and Trade) signed a cooperation agreement on the application of advanced technology and e-commerce to support tourism development, sports and tourism showing the determination of the two sides to promote e-commerce in the field of tourism in the context of today's thriving digital economy activities. E-commerce activities in the field of tourism with many international online transaction platforms such as Airbnb, Agoda, Booking... have thrived, overwhelming domestic exchanges, arising some problems. The cooperation between the Department of E-commerce and Digital Economy and the Vietnam National Administration of Tourism contributes to improving the competitiveness of domestic e-commerce exchanges, better ensuring the interests of tourists when using the Internet. travel services traded on online exchanges. Maybe to mention a number of projects that have been and are being jointly implemented by the two sides such as the program "Vietnamese card - One national card", and the application development project (Mobile App) to support tour guides and tourists. Project Information display system for tourism management (Dashboard)...

In January 2021, the National Administration of Tourism in collaboration with Google held the launching ceremony of the online promotion project "Google Arts & Culture - Wonders of Vietnam". The project was implemented with the active participation of the localities of Quang Binh, Thua Thien Hue, Da Nang, Quang Nam, Oxalis Adventure company and photographer Tran Tuan Viet. This is the first time that Vietnam tourism has been promoted on the famous online platform Google Arts & Culture - where the collections of more than 2,000 museums around the world are located, where the quintessence of art and culture converges. culture and history of nations. Through this platform, the outstanding strengths of Vietnam's tourism such as heritage, culture, cuisine, and landscape... will be widely promoted to a large number of international friends.

On the local side, many Vietnamese tourist destinations have gradually applied technology to improve the quality of tourist services; Leading companies such as Hanoi, Ho Chi Minh City, Da Nang, Ninh Binh... In January 2018, Hanoi put into operation an automatic interpretation system about the Van Mieu - Quoc Tu Giam and Van Mieu relic relics. Guide software to visit Thang Long Imperial Citadel on mobile phones with 8 languages including: Vietnamese, English, French, Spanish, Korean, Japanese, Thai, Chinese; It not only creates favorable conditions for tourists to visit and learn about relics, but also becomes an effective means of tourism promotion and historical education for tourism human resources. In addition, the introduction of Hoan Kiem website (www.hoankiem360.vn) helps visitors easily learn and experience Hoan Kiem district tourism

through 360-degree image technology. Along with that, Hanoi has built a digital map of Hanoi tourism according to GIS technology, built the Hanoi tourism portal, covered free wifi in many public places such as Hoan Kiem lake area., Noi Bai international airport... In Ninh Binh, a tourist portal and smart travel application on mobile devices have been built in the first phase, while digitizing tourism industry data and connecting facilities. Tourism data with the fields of departments, departments, sectors. After that, the province built a data warehouse on tourism, implemented SMS marketing based on customers' geographical locations, and provided free public wifi to tourists at tourist attractions. In June 2018, Ninh Binh Department of Tourism officially opened the tourist portal (visitninhbinh.vn) and a smart travel application on mobile devices called "Ninh Binh Tourism" to facilitate It is beneficial for tourists to find accurate and up-to-date information about Ninh Binh tourism. Ha Giang has also signed a cooperation agreement to develop Ha Giang tourism through digital transformation and smart tourism between the National Administration of Tourism, the People's Committee of Ha Giang province and the Telecommunications Corporation. MobiFone aims to cooperate, build and support the implementation of digital transformation solutions for the tourism industry in Ha Giang province. Thereby, contributing to increase the value and attractiveness of Ha Giang's tourist destinations, products and services, and at the same time close connection between management agencies - tourism enterprises - tourists., helping information exchange quickly, timely and effectively... Ho Chi Minh City actively promotes the application of information and communication technology in the tourism industry through the use of a number of tourist information stations through bright; Smart travel software "Vibrant Ho Chi Minh city", convenient software.

Other benefits such as "Sai Gon Bus", "Ho Chi Minh City Travel Guide", "Ho Chi Minh City Guide and Map"... In the central part of Vietnam, Da Nang is also a leading locality in developing tourism models. smart. In addition to regularly using electronic marketing methods to promote tourism, Da Nang has built software systems and utilities to support tourists such as "Da Nang Tourism", "inDaNang", "Go! Da Nang", "Da Nang Bus". In particular, Da Nang has put into use the chatbot application "Da Nang Fantasticity." This is the technology used first in Vietnam and Southeast Asia (along with Singapore).

Currently, 100% of tourism management agencies from the central to local levels of Vietnam have tourism websites. Most tourism businesses, especially travel businesses and hotel businesses ranked according to the star scale in Vietnam, also have their own websites. The improvement of network infrastructure is also focused on investment by key tourism localities, many localities throughout the country have been installing free wifi stations. Vietnam's tourism businesses are also actively approaching Industry 4.0 to keep up with new business trends and meet the diverse travel needs of tourists. Many businesses are reinventing themselves to become smart businesses. Accordingly, most business activities are carried out online: marketing, product promotion; market expansion research; customer care consultant; carry out purchase - sales, payment transactions... Leading tourism enterprises in Vietnam are promoting the application of modern technology in the tourism business such as Vietravel, Saigontourist, Vitour, Hanoitour-ist, Benthanhtourist...

3.2 The existence of smart tourism in Vietnam

In general, over the past time, although the tourism industry is making great efforts in implementing smart tourism development solutions and has achieved certain achievements, bringing significant results for the growth of tourism. industry impressions. However, there are still some shortcomings and limitations. Specifically:

Firstly, compared to other countries in the world, Vietnam is a country with a low level of science and technology. Therefore, the research and production of technological products applied to tourism is still limited. The level of technological readiness to develop smart tourism in Vietnam is not high, many localities have developed tourism, but the readiness level for ICT application and development is very low such as: Quang Binh, Khanh Hoa, Lam Dong, Lao Cai...

Second, although many localities have implemented measures to develop smart tourism. However, these activities take place locally, lacking a scientific basis, a legal basis, and especially the lack of a "smart tourism model" that ensures effectiveness. This leads to a lack of focus, lack of synchronization, and low efficiency. The cause of this problem is that there are no specific policies and documents regulating or guiding the development of unified smart tourism in Vietnam, and smart tourism is a new trend, not yet established. Is there any locality in Vietnam that has successfully built it as a learning model for other localities?

Third, the rate of information technology application of tourism enterprises is still low: The approach of businesses to smart tourism is concentrated in a few large enterprises while Vietnamese tourism enterprises are mainly small and medium enterprises, with little capital and small businesses, the financial ability to pay for investment in technology application is not high. *Fourth*, the knowledge, qualifications, and skills of the tourism workforce in terms of smart tourism and information technology are still limited, which is a factor hindering access to and awareness of tourism development. Smart calendar.

Fifth, the development of smart tourism fundamentally changes the operation mode of actors in the tourism industry, while the legal regulations have not kept up with the reality of development.

IV. HENCING THE EXPERIENCE OF CUSTOMERS THROUGH THE PILLARS OF SMART DESTINATIONS

Researchers trace the origins of smart destinations to the development of smart cities which follow similar principles (cf. Borges-Tiago et al., 2022; Jiang et al., 2020). However, smart destinations are also unique in that they pursue different objectives, thus requiring distinct strategies. The concept of smart destinations is universal because it is applied to both urban and rural areas and considers not only residents but visitors as well. good, the objectives of smart destinations are not limited to the improvement of the locals' quality of life. Instead, they additionally focus on such aspects as the sustainable development of tourist areas and the increased quality of visitors' experiences at the destinations (Gretzel et al., 2015; Lopez de Avila, 2015).

Considering the previously noted differences, the following discussion examines the principles of smart cities to understand their applicability in the smart destination context. Informed by the smart cities literature (Lombardi et al., 2012), the present study proposes four pillars that form the foundation of smart destinations: IT infrastructure, e-governance sustainability, and livability (Fig. 1). The next conceptualization of core smart destination principles will consider how these dimensions help make destinations more competitive and create better visitor experiences, while also accounting for their contribution to wider smart cities ambitions including improved livability and governance (cf. Jiang et al., 2020; Sigalat-Signes et al., 2020)

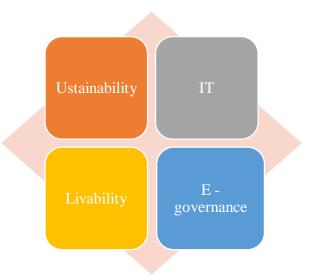


Figure 1. The foundation of a smart destination

4.1. Smart information technology (IT) applications

As with smart cities, technology is central to smart cities, and therefore, IT targets one of the pillars of the framework that is proposed in this study. IT has introduced new business models and continues to shape the business world through innovations that converge virtual and physical identities and models with the real world

(Mendelson, 2015). In the tourist industry, IT is now a prerequisite for the staging and co-creation of tourists' experiences, where technologies can enable, create, attract, and enhance those experiences (Neuhofer et al., 2012; Xiang et al., 2021).

The central role of information technology in smart destinations is highlighted in the following definition by Lopez de Avila (2015), who defines a smart destination as: 'an innovative tourist destination, built on an infrastructure of state-of-the-art technology guaranteeing the sustainable development of tourist areas, accessible to everyone, which facilitates the visitor's interaction with and integration into his or her surroundings, increases the quality of the experience at the destination, and residents' quality of life' (Gretzel et al., 2015, p. 180). Thus, the core characteristic of a smart destination is the integration of technology into the existing physical infrastructures, so that technology is entrenched within the surrounding environment making it pervasive and all-embracing.

The smartness of destinations depends on the availability and sophistication of three technological components: the Internet of Things (IoT), Cloud Services, and end-user Internet services (Wang et al., 2013; Zhang et al., 2012). The IoT is a network of physical objects (ie, people to people, people to things/devices, and

things/devices to things/devices) that interact through the Internet (Patel & Patel, 2016), and examples include sensors and wearable devices.

To support the immense amount of information utilized by IoT platforms, smart destinations require Cloud Services designed to provide convenient access to applications, software, and data (Wang et al., 2013). Another important technological component of smart destinations is the End-User Internet services. The connectivity aspect is critical to the functioning of smart tourism systems (Gretzel, 2018). This provides all applications and equipment necessary to provide customers and organizational stakeholders with access to Cloud Computing Services and IoT platforms (Wang et al., 2013).

The first obvious step for Vietnamese tourism destinations is to invest in information and communications technology (ICT) infrastructure for the "5As of tourism": accessibility, attractions, activities, amenities and ancillary services. However, smart tourism is more than just the adoption of technology. It includes many other aspects including sustainability, efficiency, innovation, and management. A crucial requirement is having smart human talent to manage smart tourism. Future leaders and senior managers in tourism need to be equipped with technological acumen, critical, managerial, and analytical thinking, as well as problem-solving skills in order to generate positive solutions to global sustainability issues.

4.2. E-governance

The effectiveness of stakeholder collaboration depends on the governance of smart destinations. However, the meaning assigned to governance here extends beyond mere effectiveness: 'Meijer and Bolívar (2016) suggest that smart city governance is not just about good administration of smart cities but involves a transformation of governing bodies and governance processes' (Gretzel, 2018, p. 178; Meijer & Bolívar, 2016). In line with this argument, this study proposes to view governance as a transformation of tourism entities to function effectively within the emerging smart ecosystem.

In the context of smart cities, this governance is known as e-governance or smart governance, which uses on ICTs to improve the provision of public services (Belli et al., 2020). E-governance can involve the exchange of information and knowledge between social actors and governmental organizations. E-governance may also create opportunities for the engagement and participation of these actors in collective decision-making regarding critical public matters. Smart or e-governance is viewed as an essential attribute of a smart city that depends on citizens' engagement and public-private partnerships (Lee et al., 2020). E-governance will be considered as another critical element of the smart destination framework, since the vision of becoming a smart (er) destination could not be achieved without effective governance of tourism, place, and its stakeholders.

4.3. Sustainability

Sustainability is commonly referenced in discussions of smart cities and destinations and is often viewed as the core goal of any smart initiative (eg Lee et al., 2020). The role of ICTs to support and achieve sustainability in tourism destinations has been recognized by researchers due to its potential impact on the tourism industry. For instance, the use of ICT as an innovative tool to improve sustainability was recommended by Ali & Frew (2014), and the positive impact of ICT on various aspects of sustainability was found in the tourism context (Benckendorff et al., 2019; Gossling, 2017).

The wealth of many cities become increasingly dependent on tourism and the quality of natural resources, especially when these resources are scarce. The utilization of natural resources, therefore, must be sustainable to guarantee their preservation. However, Why, p. 7) issues with sustainable development, as with most of the key of our key, is that it requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus-building. These critical objectives could be achieved through building 'smarter' destinations that unite currently fragmented sustainability efforts and ensure the involvement of all key stakeholders. Therefore, the third pillar that forms the foundation of smart destinations is sustainability.

The sustainability of smart destinations, however, is not limited to ecological or environmental sustainability, but should additionally integrate social, cultural, and economic sustainability (Shafiee et al., 2019). Indeed, some view sustainable or green tourism as 'the green practice for addressing poverty, employment, and economic diversification and this is especially true in the case of developing countries (Pan et al., 2018, p. 454).

The economic sustainability of tourism destinations requires 'generating prosperity at different levels of society and addressing the cost-effectiveness of all economic activity," while social sustainability refers to such aspects as the provision of equal opportunities for all and equal distribution of resources within destinations (Goeldner & Ritchie, 2012, p. 372). Finally, sustainable development may not be possible without a culture that is an enabler and a driver of the economic, social and environmental dimensions of sustainable development (UNESCO, nd, p. 1). As an indispensable part of any sustainable development, cultural preservation is also

essential to smart tourism initiatives that, together with other forms of sustainability, build the foundation of smart destinations.

4.4. Livability

Smart destinations aspire to be places where residents enjoy a good quality of life. The livability concept is primary to the design and implementation of smart city initiatives as many conceptualizations of smart cities evolve around this aspect. Harrell et al. (2014) describe a livable community as one that is safe and secure. similar, a live destination can be defined as a destination that is safe and secure for residents and tourists alike. Safety alone, however, could not ensure the livability of communities and destinations. Douglass (2002) also suggests viewing the livability of cities as a 'clean environment for daily living' (p. 133) with Herman and Lewis (nd) adding mobility as another aspect, which implies the ability of people to move around various places freely (Romao et al.,2018) acknowledged that there are several definitions for the concept of 'livability'. However, some important elements include access to health care, safety, cost of living, and the work environment.

Two final aspects that characterize destination livability include opportunity and engagement. The American Association of Retired People (AARP.) stresses that livable communities facilitate interactions among people, providing opportunities for residents to engage with others through social involvement or via Internet technologies. Feeling engaged with a large community alleviates social isolation making the community stronger and more livable (AARP., nd). Recently Uysal et al. (2020) that designed for tourism should take into the quality of life its residents. Furthermore, they advocate for using the principles of co-creation, and experience design in developing destinations that serve tourists, residents, and other stakeholders. Technology and smart design were also presented as possible solutions in relation to the issue of quality of life in tourism destinations (Uysal et al., 2020).

V. CONCLUSION

"Smart tourism" is an indispensable component of the "smart city" and is becoming a key component of economic growth in many countries. To develop smart tourism, it is necessary to have certain conditions and premises- its essential foundation is the application of advanced scientific and technological achievements of Industry 4.0. Therefore, within the framework of this article, the term "smart tourism" has been explained on the basis of theoretical synthesis and clarified its nature and components. At the same time, analyzing the current situation of smart tourism development in Vietnam in recent years, pointing out the advantages and achievements that have been achieved and the difficulties and limitations that still exist. Thereby, the article also made some recommendations to develop smart tourism in Vietnam in the coming time, which is the need to continue to improve institutions and policies, identify models and pilot implementation, and develop smart tourism. develop technologically qualified human resources and strengthen international cooperation in science and technology, promote propaganda, raise awareness about smart tourism development, form an integrated system and exchange information. change smart travel data, thereby creating added value for tourism products and services.

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