

Technology application in tourism Sustainable development goals: A case study of Japanese-speaking tour guides

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Abstract:

The Covid-19 pandemic has been causing serious impacts on the Vietnamese economy and people's lives. However, it has also spurred businesses to quickly convert to digitalization and smart tourism. For the tourism industry, there have been many changes that have caused the market to be restructured. The e-commerce and tourism industries have been hit hard. This has made this seriously degraded economy an inevitable response to the change of market trends that require businesses to be able to adapt. It is expected to achieve and exceed 8/12 key targets for the whole year. Macro-economy continued to be maintained stably; inflation is under control, the consumer price index (CPI) in 9 months only increased by 1.82% on average, the whole year is estimated to increase below the level assigned by the National Assembly; major balances of the basic economy are secured. A recent survey by the Tourism Advisory Board conducted with Vnexpress Newspaper on the psychology and behavior of tourists during the Covid-19 period showed that up to 40% of tourists book tours directly, while 36% prefer booked through online platforms. The number of tour operators re-operating and licensing has increased again with 2,563 international tour operators, 1,060 domestic tour operators. Since the pandemic, 90% of accommodation establishments have reopened, reaching over 55% of room capacity on weekdays and over 95% on weekends, especially destinations with great attraction.

Keywords: E-tourism, Smart-tourism, Digital technology, Tourism , Japanese.

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1. Introduction

Firstly, the strategy of Vietnam's tourism industry is to go for the widespread and unchanged development of the latest products along with the most powerful applications, and at the same time apply many technological advancements to promote the development of tourism. optimize user experience diversity, enhance customer experience and optimize commercial activities. With online technology platforms, online booking platforms like Booking.com, Agoda and big hotel chains like Accor, Intercontinental are always the number one choice of travelers because these companies are always pioneers. in helping customers easily search and book hotels [1].

Tripadvisor and Foody are popular apps and websites for researching millions of travelers visiting tourist attractions, local cuisine, and cultural attractions. In addition, payment gateways such as Momo, ZaloPay, international cards such as Visa, Mastercard have made online transactions as convenient as possible. Popular applications such as Google Maps, Uber, Grab, Google Translate are also widely used to facilitate travel and communication [2].

The figures calculate that by 2021, Vietnam's tourism industry revenue is estimated at 9.4 billion USD, this is a growth of 13.9% for tourism operators from 2021 to 2025. This rate is expected. We also support businesses in the tourism industry [3].

With the growth trend of the tourism industry in the future, the application of technology will become a key factor to improve the competitiveness of Vietnamese tourism enterprises. However, to exploit the full potential of technology, investors and application companies must research, develop and deploy their own technology solutions in accordance with the needs of customers. and market. In recent years, Vietnam has become one of the popular tourist destinations in Southeast Asia, with the number of foreign tourists increasing rapidly. Vietnam welcomed more than 18 million international tourists in 2019, up 16.2% year-on-year, according to data from the General Statistics Office of Vietnam. This increase has spurred the development of Vietnam's tourism industry, while creating opportunities for technology development in this sector. In addition to traditional technology applications such as hotel booking, online payment, information search about tourist attractions, Vietnam is also taking advantage of the potential of new technologies such as virtual reality experiences. VR), artificial intelligence (AI) applications. Enhancing the travel experience of many visitors was mentioned [1]. This also means that businesses in the tourism industry must continue to improve their competitiveness by using the latest technology, while enhancing human resource development and service quality to meet demand. demand of the tourism industry.

2. Literarute Reviews

In recent years, the use of technology in the tourism industry has become popular with many different applications being developed and used in countries around the world, including Vietnam. This literature review explores the different ways technology is used in Vietnam's tourism industry and its impact on both tourists and tourism businesses [1]. There is one of many reasons that the most important technology application in the tourism industry in Vietnam and around the world is the online hotel booking platform. This study uses data that

have been conducted and surveyed in previous studies in Vietnam. Through online sources such as TripAdvisor, Foody and websites of a travel agency [4]. These resources help travelers make informed decisions about their travel plans and create personalized itineraries [3]. In general, technology has had a great impact on Vietnam's tourism industry, increasing efficiency and convenience in tourism planning and management. As tourism continues to grow in Vietnam, we will likely see more advancements and applications of technology in the industry [5].

3. Limitations causing obstacles in the process of applying digital technology to the tourism ecosystem

In the era of digital technology, which can be said to be strongly developed and is entering major changes like today, the application of digital technology to the tourism ecosystem is becoming a popular trend all over the world. Thereby including many limitations, one of which includes the ability to manage infrastructure, technical processing ability and limited experience, having to manage digital services with many shortcomings. In which, one of the biggest limitations of technology when applied to the tourism ecosystem is that our country's technology infrastructure is still underdeveloped and uneven in locations. This not only makes it difficult to deploy digital technology in tourism or other industries. However, internet problems and network stability also make it difficult for customers and suppliers to provide the right service.

Secondly, in which technical knowledge and limited experience also play a small part in being an individual company in the tourism industry, there is still not much basic knowledge about digital technology leading to the use of digital technology and this application and service has not had a certain effect. At the same time for a customer who is not familiar with digital technology, this will be extremely difficult for the customer to use because they have a little trust and are difficult to use in new applications.

4. Methodology

The purpose of this study paper is to give strategies for incorporating technology into the tourist ecosystem in Vietnam and Ho Chi Minh City. The essay employs a variety of research methodologies to determine the most important aspects of Vietnamese tourism in the age of information technology application. First, the study paper analyzes data from previous researchers on the issue of tourism in Vietnam; the data must be chosen; and the hypothesis and

justifications for that hypothesis are offered. Also the reasons why and why not this approach of examining the highlights of Vietnam's tourist business in the twenty-first century. Research article also undertake a direct survey of the city's tourism attractions. Ho Chi Minh City to assess the existing scenario and how the process of using digital technologies in the tourist sector in Vietnam is challenging and hard. Following that, the interview and dialogue methods are used to provide opinions and methods in a more effective and reliable manner. Finally, it is the empirical approach that is utilized to determine whether the accuracy is accurate or whether the variables are correct or not. The article provides a basic review, and while there are numerous difficulties when applying technology to the Japanese tourist business in Vietnam, this will be a significant step forward for Vietnam's tourism growth.

5. Results

While many research papers have been written about the concepts of E-tourism and Smart tourism, both are concerned with the use of digital information and communication technologies in the tourism industry. However, in this case, it is about the transfer of technology that allows customers to receive information as well as promote shopping and commerce more easily, but E-tourism is a concept in general. The notion of using information and communication technology to assist and improve tourist sector activities, whereas smart tourism is a concept that outlines the things in which we use information technology [6]. Artificial intelligence, for example, analyzes data to better consumer experiences in and out of travel. E-tourism focuses on delivering tourist information online, such as reserving this hotel or purchasing this airline ticket, as well as looking for information on recreational tourist sites or recreational activities in the local tourist area.

	E-tourism	Smart tourism
Impact phrase	Before and after the trip	Before, during, and after the trip
Operation range	Online digital environment	Combine digital environment and real experience
Basic technological means	Website	Touch system and smart phone
Operational Essentials	Information	Big Data
Operating Structure	Value chain	Eco-system
Level of Interaction	Limited - passive one-way	Regular - active two-way

Figure 1 : The distinctions between E-tourism and Smart Tourism

Smart tourism, on the other hand, will be applications concerning the uses of technology in the tourist guide system, automatic paid service systems, or the use of technology to maximize the travel experience for visitors. In the calendar business, these two holes represent two distinct notions. However, in Vietnam, these two types have grown quite rapidly, and online applications such as booking or traveloka have attracted a large number of customers not only in the country but also from abroad. Foreigners have also had more opportunities to book hotels and buy plane tickets online, which has been particularly warmly appreciated by everyone who believes that this is an application that may assist many people achieve great efficiency when traveling [4]. However, the application of these new technologies in tourism poses numerous challenges for business travelers and individuals due to a lack of qualified human resources to use them [6]. Furthermore, customers are always concerned about information security when using applications.

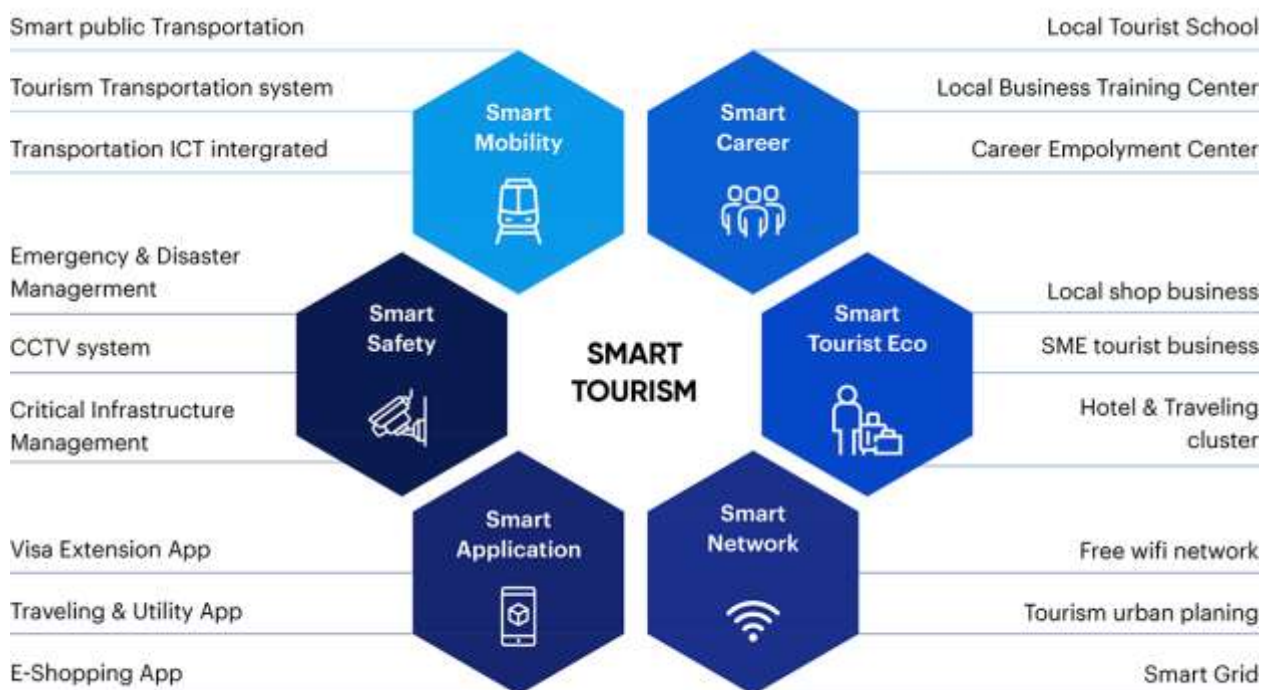


Figure 2: Smart tours' applications

Smart tourism encompasses various consumer values as well as concerns concerning resorts, resorts, and restaurant systems. Smart tourism employs technology to connect visitors with tourist destinations via online applications, allowing visitors to view a variety of information and thus assisting in obtaining the best travel experiences for the most appropriate and suitable choice for the rich in their pocket. Smart tourism also has a large impact on the country's

economy since radio creates many individuals who are able to comprehend the uses of technology, giving rise to many different sorts of businesses and tourism. Encourage professional development. Smart tourism also stimulates the purchase and exchange of goods in tourist destinations, which helps to a clean green economy. Smart tourism also creates a complete connecting system that allows people to meet and interact on a smart network [7]. Also included is a guarantee of visitor information security for those participating in smart tourism (Figure 2). Not only that, smart tourism also has the ability to study consumer shopping behavior and be prudent in spending, which will be a trend model in the future and will become a method of using effectively using human-to-human interaction to create more advanced technology than applying information technology to develop smart tourism.



Figure 3: Composition of tourists coming to Vietnam in 2019

Among many other major contributors to tourism, Vietnam in 2019 includes China, Korea, Japan, Hong Kong, USA, Malaysia and Thailand, the most popular tourist destinations for international tourists to visit. Visiting in Vietnam are cities such as Da Nang, Ho Chi Minh City, Ha Long Bay. Of which, for domestic tourists, the south and central regions contribute some of the total and number of tourists in Vietnam. In general, the composition of tourists in Vietnam is diverse in origin and location because this has created favorable conditions for the development of the tourism industry in Vietnam. According to a study by the Vietnam Bureau of Statistics, in 2019 Vietnamese tourists accounted for more than 16.3 million arrivals, this has increased a lot compared to many years ago, the percentage of tourists coming from the Americas was also found to be greatly increased (Figure 3). This has shown intuitively that tourism policies in Vietnam are on the right track and have made a lot of progress in recent years. When the number of tourists not only from Asian countries but also European and American countries have also known Vietnam.

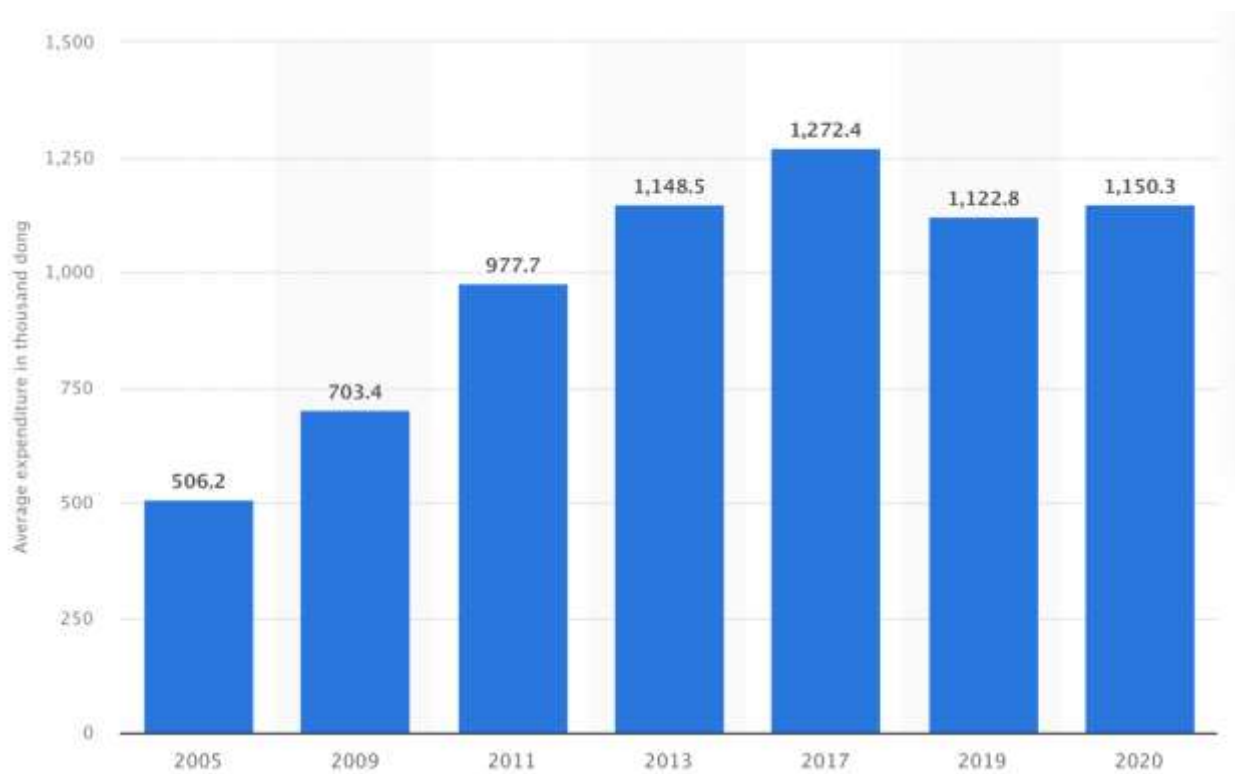


Figure 4: Domestic tourist spending per day in Vietnam from 2005 to 2020

Vietnam's domestic tourism market has experienced steady growth over the past 15 years. According to a report by the Vietnam National Administration of Tourism, the average daily expenditure of domestic tourists in Vietnam has increased from approximately 300,000 VND in 2005 to more than 1 million VND in 2020. For this increase there is many reasons given that the middle class in Vietnam has developed so that income is no longer an obstacle for tourists. In addition, the government has implemented policies to promote domestic tourism such as implementing domestic tourism stimulus programs and investing in infrastructure and tourism services in famous destinations [8]. In summary, Vietnam's domestic tourism market has grown strongly over the past 15 years and daily spending by domestic tourists has increased significantly. This trend is expected to continue as the government continues to promote domestic tourism and the economy and infrastructure continue to grow (Figure 4).

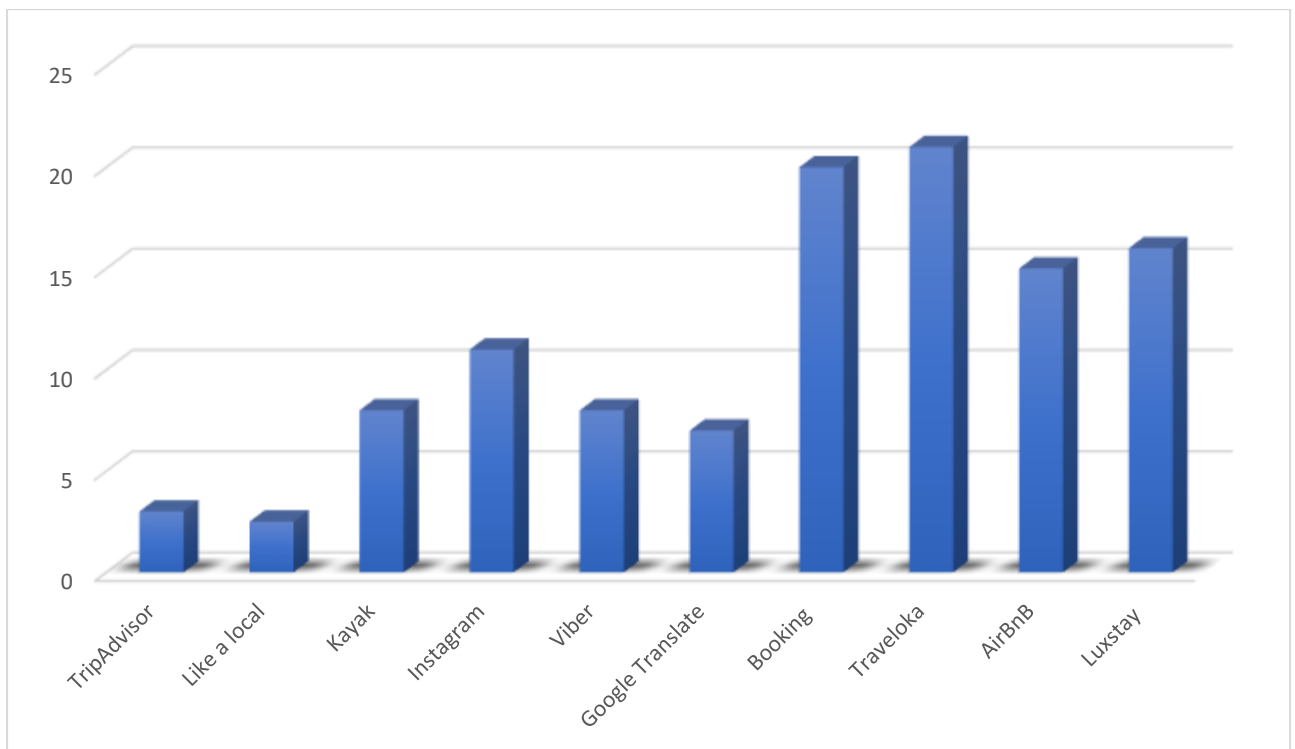


Figure 5: Top apps used by Japanese tourists on trips

Booking is an application that provides retail tours, sightseeing tickets, food vouchers, services, transportation tickets, wifi transmitters, tourist SIMs, making travel more convenient for those who want to travel by themselves [10]. Luxstay is an online booking application for Homestays across Vietnam, making accommodation selection easier and giving users a unique experience of local culture and space (Figure 5). With many attractive promotions and convenient payment policies, Luxstay will be a great choice for those who are looking for a comfortable and safe place to stay. These applications have been built for many years and were created to meet the travel needs of today's youth [9]. The application provides users with the most complete and accurate information about tourist destinations in Vietnam, with data sources that are always updated quickly and accurately [11]. The app's easy-to-use intuitive interface also makes finding information and booking services easier for everyone [12].

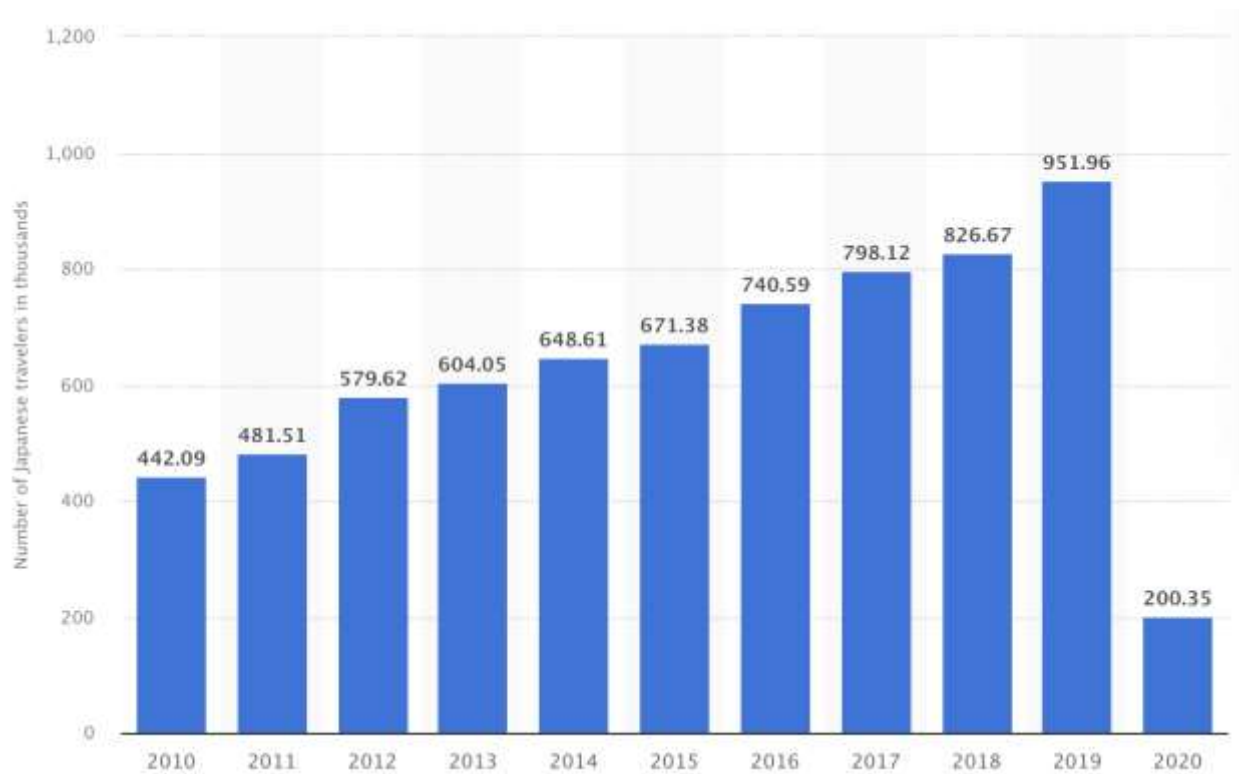


Figure 6: Number of Japanese travelers to Vietnam from 2010 to 2020

It can be seen that the number of Japanese tourists to Vietnam has steadily increased, showing that the bilateral relationship between the two countries is increasingly strengthened. According to official data released by the Vietnam National Administration of Tourism, the number of Japanese visitors to Vietnam has increased from 385,328 in 2010 to 956,818 in 2019, which is more than doubling in just 10 years. In 2019, Vietnam received a record number of nearly 1 million Japanese tourists and nearly 500,000 Vietnamese tourists traveled to Japan. Determining Japan as one of the key exchange markets, immediately after fully reopening tourism activities from March 15, 2022, the National Administration of Tourism has implemented a series of measures to restore tourism. tourism recovery and development related to policies, procedures for entry and exit, promotion and promotion [12].

Despite the challenges posed by the pandemic, Vietnam has become an increasingly popular destination for Japanese tourists over the years thanks to its natural beauty, rich culture, delicious cuisine and affordable prices affordable cost of living. The increase in Japanese tourists not only contributes to the economic development of Vietnam's tourism industry, but also promotes cultural exchange and mutual understanding between the two nations.

6. Discussion

In the context of the development of Vietnam's tourism, digital technology applications are one of the pioneers to help the commercial economy develop in the most uniform and outstanding way. However, in order to develop Vietnam's tourism ecosystem through the application of digital technology, there needs to be synchronization and close cooperation between stakeholders including businesses, authorities and experts in tourism and technology. The above study presents important research methods to learn about the application of digital technology in Vietnam's tourism industry and offers appropriate solutions to develop Vietnam's tourism ecosystem through the application of digital technology. The survey and interview method helped the process of learning about the measurements and also the many advantages of applying technology in tourism in Vietnam.

With the strong development of Vietnam's tourism industry, the application of digital technology is becoming a potential field to enhance tourism experiences and improve service quality. However, in order to develop Vietnam's tourism ecosystem through the application of digital technology, there needs to be synchronization and close cooperation between stakeholders. Researching and providing appropriate solutions will make an important contribution to bringing Vietnam's tourism industry further on the path of development. In addition, the application of digital technology to Vietnam's tourism industry not only brings benefits in terms of customer experience but also makes an important contribution to creating economic, social and environmental values. With the development of Vietnam's tourism, the use of digital technology also offers the opportunity to manage and exploit tourism resources more sustainably and effectively, thereby enhancing sustainable development of the tourism industry.

In short, developing digital technology applications in Vietnam's tourism ecosystem is an undeniable trend in the context of the development of the tourism industry. Researching and providing appropriate solutions will help Vietnam's tourism industry develop sustainably, meet the needs of customers and markets, and help improve economic, social and environmental values. tourism sector. In short, to develop modern tourism applying digital technology in Vietnam, it is necessary to continue to perfect institutions and policies to create a favorable environment for the smart tourism industry to develop. At the same time, the Government should focus on investing in research and application of science and technology, especially information and communication technology, creating a technological foundation for modern tourism. Besides, developing technologically qualified human resources and promoting

international cooperation in science and technology are also one of the important factors driving Vietnam's tourism industry towards a sustainable future and modern.

Conflict of interests

No conflict of interest is noted in the paper.

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