DIGITAL TECHNOLOGY WILL CHANGE THE TREND OF SMART TOURISM IN VIETNAM: CURRENT SITUATION AND SOLUTIONS

Le Thi Thu Hien

University of Economic Varna, Bulgaria

Abstract: Tourism is an economic sector that receives investment attention from many countries. With the rapid development of technology, the application of digital technology initiatives and solutions will help the tourism industry build a smart tourism ecosystem with high economic and social value towards sustainable development. Vietnam tourism in 2023 has reaped many successes with outstanding achievements. The awards honoring Vietnam's international destination image have contributed to clearly positioning our country's brand on the world tourism map. The entire industry deployed promotions and advertising to speed up the recovery of international tourists. Along with that is developing branded and highly competitive tourism products and services, promoting digital transformation and developing human resources. This article will focus on researching the current status of Vietnamese tourism in the digital age, and propose solutions to effectively improve the impact of digital technology on the smart tourism trend in Vietnam.

Keywords: Digital technology, smart tourism, trend, Tourist destination

JEL: L83

1. INTRODUCTION

The 4.0 industrial revolution is having a strong impact on all aspects of social life and economic sectors. The global tourism market is also witnessing change with the rise of the online travel business trend, and many new digital technology concepts are born. Digital technology brings many benefits and is an inevitable trend, a priority direction for global tourism, currently being successfully deployed in many countries.

The technology boom has caused tourists to change their travel behavior. They search for information, book airline tickets, accommodations, and even share emotions and memories of their journey all on the internet, especially social networks. Travel agencies and destinations inevitably have to quickly adapt and take advantage of digital technology to meet tourist needs and renew themselves. Research reports show that the global tourism market is also witnessing change with the rise of the online travel business trend. According to market research company Nielsen, online travel sales in the world in 2016 increased by 13.8% and reached a value of about 565 billion USD, of which the Asia-Pacific market rose to the top in the world. about online travel since 2017. In Southeast Asia, Google predicts that the value of online travel will increase from 22 billion USD in 2015 to 90 billion USD in 2025.

Also according to this study, digital transformation in tourism is expected to contribute up to 305 billion USD in profits by 2025; At the same time, it provides the necessary application tools and technology platforms to optimally support closer access to smart tourism, ensuring sustainable development.

According to the International Telecommunications Union, the number of global Internet users in 2023 will increase by 100 million, reaching 5.4 billion people, equivalent to 67% of the world's population. Statistics from media company Wearesocial show that Vietnam has 77.93 million Internet users, equivalent to 79.1% of the population.

According to the Ministry of Information and Communications, the scale of Vietnam's Internet economy in 2022 will reach 23 billion USD and is forecast to reach 49 billion USD in 2025. Travel websites and mobile apps with optimal advantages, allowing reservations anytime, anywhere, providing reviews and general information are increasingly becoming familiar addresses for young people, becoming a popular trend. Smart travel direction

Developing smart tourism has become an inevitable trend towards the sustainable development of Vietnam's tourism industry. In recent times, businesses and management agencies of Vietnam's tourism industry have focused on researching digital transformation and developing smart tourism, in order to provide the best services to tourists that can completely change. customer experience and enhance long-term competitiveness for Vietnamese tourist destinations. The rapid development of technology will help the tourism industry build a smart tourism ecosystem with high economic and social value towards sustainable development. Vietnam's tourism market is also changing due to the development of technology, especially the rapid growth of online travel.

2. LITERATURE REVIEW AND RESEARCH METHODS

Innovation, development of digital tourism, and smart tourism are inevitable trends and priority directions of global tourism. In Vietnam, digital technology contributes greatly to the changing face of tourism. At the Forum "Digital transformation to develop Vietnamese tourism", taking place at the end of September 2020, Deputy Minister of Culture, Sports and Tourism Nguyen Van Hung commented: "Vietnam is rapidly approaching Digital transformation technology and smart tourism development are inevitable trends that need to be promoted. This trend will help our country's tourism create new attract tourists, attractive products, improve competitiveness, stimulate growth and sustainable development."

2.1. Digital technology

Digital technology is the process of changing the model from traditional to digital business by applying new technology, such as big data, cloud computing, Internet of Things... changing operating methods, leadership, Work processes and company culture to suit the world's development trends. The benefits of digital technology platforms are enormous, such as: from enhancing work efficiency, improving services, to improving quality of life and exploiting business potential like never before, eradicating the distance between departments of the enterprise; increase transparency and optimize efficiency in the enterprise's management system; improve the competitive power of businesses, automate work processes; Manage and store business information...

In 2013, "Industrie 4.0" began to emerge from a German government report, referring to a high-tech, computerized strategy in the manufacturing industry without requiring the participation of human resources. human. Therefore, industry 4.0 is simply understood as the intelligence of production and management processes in the manufacturing industry. It is a tool to help countries around the world develop their countries, as well as maintain their competitiveness in the international arena. However, up to now, industry 4.0 has gone beyond the framework of the German project with the participation of many countries and has become an indispensable part of the fourth industrial revolution.

The digital age of technology 4.0 marks a strong integration between the physical and digital worlds, with the potential to change the way we live, work and interact with each other. Digital technology 4.0 creates new opportunities, improves performance and enhances innovation in almost all sectors.

Digital technology application is the application of information technology in the fields of socio-economics, foreign affairs, defense, security and other activities to enhance productivity, improve quality and increase efficiency. results of these activities. In addition, digital technology application also includes digitizing business processes, making document and record management easy, safe and convenient, aiming for a "paperless office".

Digital technology business is a form of online business. Digital technology business does not even need a premises or store, this helps save a large amount of costs and can bring more profits. The strong explosion of digital technology and the internet makes purchasing now much easier than traditional business forms. E-commerce platforms such as Shopee, Tiki, Lazada, ... are also a fertile market for developing digital technology business.

Digital technology has changed the face of the media industry in Vietnam

The media industry is changing rapidly with the development of the Internet. A few decades ago, few or very few people had personal email accounts, cell phones or internet connections. Nowadays, mobile phones have become an extremely popular means. The level of phone usage accounts for nearly 60% of consumers in the country, combined with the low-cost availability of Internet services has led to a new revolution in media and digital technology. All products, services, 4.0 technology and data are increasingly meeting consumer needs.

Digital technology has a strong impact on the Marketing field and has created many new opportunities for advertisers and marketers. Including: Artificial Intelligence (AI), Machine Learning, Big Data, Marketing automation... The most recent examples are chatbot platforms such as Chat-GPT, Poe, Bard, ... which have significantly impacted the way business is done. Marketing approach. These chatbots can create blog posts, social media updates and text documents, helping businesses save time and resources. Digital technology provides ways for businesses to more effectively manage relationships with customers, improving customer satisfaction. Digital technology is an inevitable trend of the times. Businesses, organizations and individuals need to continuously update knowledge and skills to effectively grasp and apply digital technology to keep up with trends and develop sustainably, so that "no one is left out behind".

2.2 Smart Tourism

The term "Smart Tourism" was born under the impact of the 4.0 technology revolution, especially the strong development of information and communications technology, which has allowed the creation of diverse products for the industry. tourism. Developing smart tourism is an inevitable trend in the era of the 4.0 industrial revolution, when modern scientific and industrial achievements are strongly applied in all areas of social life, including tourism. calendar.

Online travel is the application of information communication technologies to the travel industry to digitize all processes and value chains with the aim of maximizing the efficiency of service businesses. Travelers. This is the key factor to move into a smart tourism ecosystem

According to Mr. Vu The Binh, Chairman of the Vietnam Travel Association, "Smart tourism helps people access information quickly, easily, diversely and with the most information. Therefore, it has completely changed the thinking of an economic sector that is information."

According to Dr. Le Quang Dang: "Smart tourism is tourism developed on the basis of applying the achievements of modern science and technology. It is not specific to each tourism activity or type of tourism." , every tourism product... wherever and whenever there is application of the achievements of modern science and technology in tourism, then there is smart tourism".

According to An Nhi: "Smart tourism is based on a highly integrated platform of digital - physical -biological connection systems with the breakthrough of the Internet of Things and artificial intelligence. The manifestation of smart tourism is online tourism, also known as electronic tourism (E-Tourism).

Smart tourism includes 3 main components:

Smart destination: Is an innovative tourist destination, built on advanced technological infrastructure, equipped with new information technology to ensure sustainable development of tourist areas, accessible for reach of people, facilitates visitor interaction and integration into the surrounding environment, increase the quality of the destination experience, improve the quality of life of residents

Smart experiences: Technology-mediated travel experiences and enhanced information exchange through personalization, contextual awareness and real-time tracking;

Smart business ecosystem: A complex business ecosystem that creates and supports the exchange of tourism resources combined with tourism experiences. Participants in this model are also smart travelers. They not only consume but also share and create experiences, have a management and supervisory role, ensuring perfection for their next journeys and those of other travelers.

The model of developing a sustainable smart tourism ecosystem, associated with promoting economic and social development, includes 6 main areas focused on bringing higher value to tourists and

opening up development opportunities. Economic development for the province and region, new business for businesses involved in commerce in the tourism industry.

Smart applications are changing the travel industry with many new integrated features. In addition to basic features that allow users to search for information, book hotel rooms, and airline tickets, applications can also use AI to provide experiences tailored to their needs. Each individual has a list of attractions, restaurants or unique experiences based on previous travel history. The trend of super apps with integrated features has helped service providers connect into an ecosystem that provides a more efficient travel journey.

Smart security uses digital technology platforms as leverage to help regions with tourism as a key economic sector create competitive factors in products and services aimed at safe experiences.

The smart information and communications technology (ICT) network is built on a foundation that combines digital technologies such as virtual reality, robotics, artificial intelligence, 3D modeling or big data. This is also a key factor in planning strategies for developing tourist urban areas with Smart-grid electric networks. This network distributes electricity more efficiently and can help save energy. Therefore, this is also considered one of the green solutions to develop sustainable ecotourism.

Smart mobility includes a network of public transportation routes connecting most tourist attractions in the regions to create the most favorable conditions for tourists to travel for sightseeing, shopping, and entertainment. entertainment, and relaxation. For example, visitors can use public bicycles throughout the city and can check their location through a smartphone app. This will encourage more environmentally friendly travel practices.

Smart training, which includes providing appropriate training programs, is an important part of a sustainable industry economic development strategy. Vocational training centers and tourism schools will play an important role in this sustainable development model. For example, career guidance associations in Korea provide career guidance services that assist young workers in the industry with the skills needed for the market. In addition, the government also plays an important role in making human resource development policies.

The smart connection network includes a system of hotels, resorts, tours, small and medium-sized local businesses providing entertainment and culinary services, tourism training schools, and transportation services tourism... This close association will help small and medium-sized local businesses participate in the economic growth model.
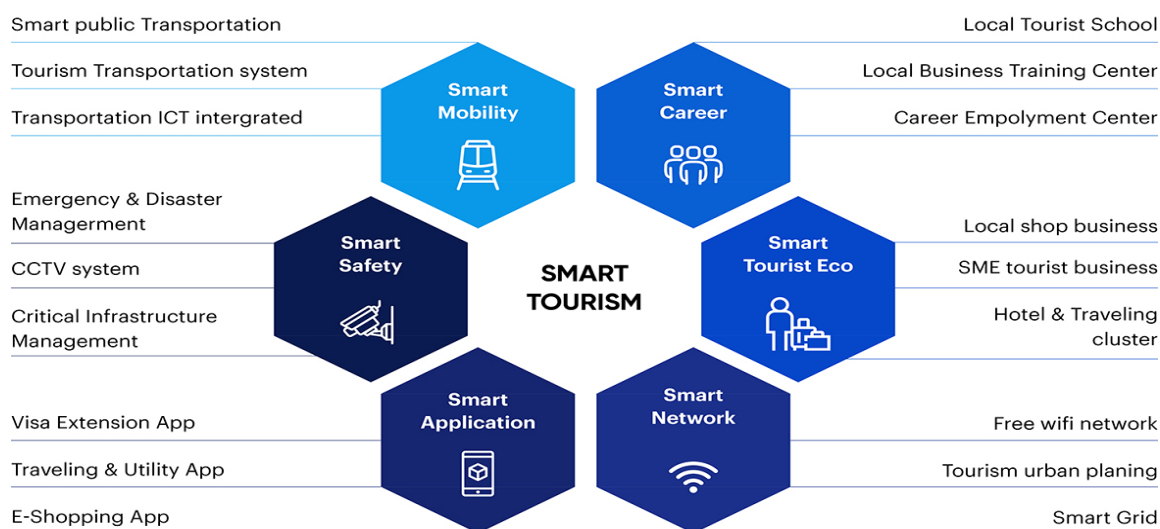
Source: Reference model from the Asian Academic Consortiumciation

In short, smart travel has become an inevitable trend, in which technology plays a very important role. Vietnam is just starting on the path to exploiting its rich potential and building a sustainable tourism

industry, so it will need policy mechanisms to support technology application, improve infrastructure and promote investment in technology applications, technology for tourism management and business activities. Therefore, developing a smart tourism ecosystem with close cooperation and coordination from relevant ministries and sectors as well as the participation of localities and businesses will be the answer to this problem to help provinces/cities with tourism as a key economic sector have enough resources to overcome the challenges of the pandemic to develop sustainable development in the future.

2.3 Research methods.

To complete this article, the author mainly uses documentary research method based on secondary data collected from books, journals, scientific reports, information sources from the internet; judgments and assessments of experts and managers related to the research problem. The author also uses descriptive statistical methods to cites theories on digital technology and smart tourism, focusing on analyzing the current status of the impact of digital technology on the smart tourism trend in Vietnam, pointing out strengths and weaknesses and on that basis, proposing groups of solutions to help develop smart tourism effectively.

3. PRESENTATION

3.1. Current status of technology application in smart tourism development in Vietnam

Different from traditional tourism, smart tourism focuses on the benefits of tourists but ensures the lowest cost, safety, and convenience based on the application of technology and use of modern equipment, global information and data. Many countries in the world have implemented Smart Tourism in many different forms to create highlights and competitive advantages in tourism. Europe is considered an advantageous and leading region in this new development trend such as Germany and Italy.

In Asia, many destinations in Japan, Korea, Thailand, Malaysia, and Singapore also invest heavily in smart tourism such as applying e-wallets, QR codes, using fingerprints to pay for services, and check-in. at the airport, check-in, travel. experiences based on virtual reality technology... The development of information technology is also completely changing the way tourists access and share information. In particular, the explosion of social networks and mobile applications has greatly impacted tourists' choice of destinations, places to stay, and places to eat.

According to statistics, digital technology and data platforms will dominate growth in the Asia-Pacific region with 80% of travel booked online and 87% of the younger generation believing that smartphones are their technology. Essential tool for travel. Smart city tourism can be enhanced by new Internet of Things technologies in many ways. These include: Smart ticket booking; Smart security service; Improve transportation services; Virtual reality; Language services; Smart city robots will guide visitors around…and more!

Not out of the world trend, Vietnamese tourism is quickly approaching smart tourism to create many new attractive tourism products, stimulating growth and sustainable tourism development. Vietnam has many opportunities to develop smart tourism, clearly shown in the physical conditions, policies that pave the way as well as the market potential to develop smart tourism.

According to statistics from We Are So-cial (wearesocial.com) in 2018, worldwide there are 4.02 billion Internet users (accounting for 53%), nearly 3.2 billion social network users, more than 5.1 billion people. billion mobile phone users (accounting for 68%) in which mainly smartphones are connected and use the Internet. In Vietnam, with nearly 100 million people, there are 64 million Internet users (67% of the population), 55 million social network users (57%), and more than 70 million mobile phone users (73%). This shows that the proportion of people using the Internet and smart devices in the world and in Vietnam is very large. This is a great premise for Vietnam to develop smart tourism. According to statistics from the Vietnam E-Commerce Association (VECOM), the proportion of domestic tourists booking hotels online and booking tours online reaches more than 60%; The proportion of international tourists using these two services reached more than 75%. Another survey of international tourists to Vietnam showed that up to 71% of tourists consulted destination information on the Internet; 64% make reservations and purchase services online during their trip to Vietnam.

Currently, many provinces and cities of our country have been supported by the Vietnam Telecommunications and Information Technology Group (VNPT) to develop Smart Tourism. VNPT has supported, consulted, and deployed Smart Tourism solutions in 63 provinces and cities nationwide and completed the Smart Tourism Project applying modern technology. Tourists are directly becoming potential "smart tourists" of Vietnam tourism. Although this new type of tourism has great potential customers, the online travel market in Vietnam still has many limitations. Global brand online travel companies (such as: Agoda.com, booking.com, Traveloka.com, Expedia.com) are monopolizing the market with about 80% market share. Meanwhile, there are only about 10 Vietnamese businesses doing direct tourism business such as Ivivu.com, chudu24.com, mytour.vn, trip-pi.vn, vntrip.vn... Therefore, smart tourism will be a "fertile market" for Vietnamese tourism businesses.

3.2. Opportunities and challenges for smart tourism development in Vietnam

3.2.1. Opportunity

The 4.0 industrial revolution is having a strong impact on all aspects of socio-economic life, changing the way companies operate in most fields. The global travel market is also witnessing change with the rise of online travel businesses.

In Vietnam, the 4.0 Industrial Revolution poses both opportunities and challenges for the tourism industry, which is receiving special attention from the Party and Government. Developing Smart Tourism in Vietnam brings many opportunities for the tourism industry. The Party and State have strong specific guidelines and policies to take advantage of the achievements of the 4.0 Industrial Revolution, including Smart Tourism.

The development of technology and the rapid growth of online travel have forced all sectors of the tourism industry, from state agencies to travel companies, to create an integrated system. travel data. From there, Vietnamese tourism must link closely with the region and the world, strengthen digital connections, and develop smart tourism in a professional and modern direction.

In addition, Vietnam's digital technology and telecommunications infrastructure has developed equivalent to the world's general level. Smart tourism is being applied at a number of tourist destinations in Hanoi such as Bat Trang pottery village, Thang Long Imperial Citadel, Temple of Literature - National University and Hanoi Old Quarter.

Digital technology will change the trend of smart Vietnamese tourism: In May 2023, Vietnam launched the Viet-Smart Travel Card for tourists to book hotels and air tickets, along with a number of other travel services. One way for Vietnam to strengthen its efforts to develop smart tourism is to leverage tourism platforms, which are multi-service platforms that play a core role in the digital transformation process, with the potential to accelerate and support Supporting the smart tourism revolution in Vietnam by providing expertise and partnerships to create a complete tourism ecosystem.

Convert from offline to online: Vietnam's online travel market is expected to reach 9 billion USD by 2025. In fact, the Vietnam E-commerce Association said that most tourists are domestic and foreign (over 60% and 75%) Use online platforms to book hotels and tours. The path to smart tourism is opened by digitalization.

Customer-centric thinking: Transitioning to smart travel is not simply about adopting technology, but also requires a shift towards a customer-centric business approach. For example, during the group Blackpink's tour lasting two days on July 29 and 30, 2023 in Hanoi, a huge number of international fans flocked to Vietnam, causing the number of tourists at many different destinations in capital has increased by 20%. Travel platforms have seen hotel occupancy rates increase by 15%, and spending on food, transport, shopping and local services have also increased significantly. And in a society increasingly moving towards cashlessness, SMEs can leverage proprietary mobile payment systems and e-ticketing to improve operational efficiency and deliver a seamless customer experience.

Digital media contributes to conveying the image of safe, friendly and attractive Vietnamese tourism: Since Vietnam fully reopened tourism activities from March 15, 2022, communication work on the digital platform of the Vietnam National Tourism Administration has been focused on strongly implementing, making an important contribution. It is important to promote information and images of

Vietnamese tourism to international friends and partners. In the context of the impact of the Covid-19 pandemic, the Tourism Information Center (Vietnam National Tourism Administration) has proactively adapted and flexibly developed digital platforms to promote communication. Thereby, a digital media ecosystem has been formed including diverse websites and social networks such as Facebook, YouTube, Zalo, Viber, Instagram... Technical infrastructure, information content, video clips, images. Photos are focused on innovation and diversity to meet the requirements of policy communication, state management and promoting the image of Vietnamese tourism in the new situation.

Promote communication on tourism recovery policies: Through the digital media channels of the Vietnam National Tourism Administration, information about the Party and State's guidelines and policies on tourism development is updated quickly, promptly and accurately to the community. domestic and international contracts. In 2023, a key task of the Vietnam National Tourism Administration is to strengthen state management of tourism, organize working groups to inspect compliance with legal regulations on tourism in many locations. in all 3 regions of the country. At the same time, the Advisory Department of the Ministry of Culture, Sports and Tourism issued the Vietnam Tourism Marketing Strategy until 2030; Project "Some models for developing night tourism products"; Project "Application of industry 4.0 technology to develop smart tourism, promoting tourism to become a key economic sector".

Promote and enhance the image of Vietnamese tourism in the world: Promoting the image of safe, friendly and attractive Vietnamese tourism to international tourists is an important task of the tourism industry after reopening. In the new context, the Tourism Information Center (Vietnam National Tourism Administration) has focused on innovating communication methods, diversifying communication channels and communication content. Promote promotion on the national tourism website https://vietnam. travel in combination with various social networking platforms such as Facebook, Instagram, YouTube, Zalo, Viber... to take advantage of the spillover effect. widely. The content conveyed is increasingly rich through articles, images, video clips, infographics... to increase communication effectiveness.

With efforts to promote promotion, the national tourism website specializing in promoting Vietnamese tourism abroad https://vietnam.travel has risen sharply in the world. In October 2022, the website was ranked #152,000 globally, an increase of 423,000 places compared to the same period in 2021, the highest increase compared to competitors in the region. In February 2023, the website ranked #128,229 in the world, equivalent to Thailand. The outstanding growth results of the website https://vietnam.travel reflect the high efficiency in implementing Vietnamese tourism marketing abroad on the digital platform of the Vietnam National Tourism Administration, contributing to promote and attract international visitors to Vietnam.

The effectiveness of communication and tourism promotion has contributed to a sharp increase in international searches for Vietnamese tourism in the past two years. In particular, from March 15, 2022 when Vietnam fully reopened tourism activities, Vietnam quickly became the destination with the highest growth rate worldwide. In 2023, the number of international searches for Vietnamese tourism will reach a growth rate of over 75%, ranking 6th globally – ranking above other countries in the region such as Thailand (10), Indonesia (11), Malaysia (11). 12), Philippines (14).

3.2.2. Challenge

Besides opportunities, there are challenges in unifying thinking and awareness regarding the inevitable development trend of smart tourism.

– Synchronous connection on digital platforms between relevant entities in the tourism industry; Resources for synchronous and sustainable development of the Smart Tourism ecosystem are limited.

– Specific mechanisms and policies for smart tourism development are lacking

– Sometimes, it also does not serve the needs of those who want to experience travel outside the smart city realm.

– Vietnamese travel companies and travel agencies haven't fully exploited the advantages of information and technology in improving competitiveness, attracting customers and managing the company.

– The development of Smart Tourism fundamentally changes the way entities in the tourism industry operate, while legal regulations do not keep up with actual developments.

– Information technology infrastructure (telecommunications network, accompanying modern equipment) is uneven, with clear differences between urban areas and rural and regional areas mountains... are very limited for developing smart tourism or building products with high-tech elements.

– The management of the Smart Tourism model operation system is still confusing due to the lack of experience among the human resources in tourism organizations and businesses.

– The role of tour organizers is decreasing.

– The number of people accessing the internet is quite large, the scope is wide, but the recognition and application and use of high-tech products in developing Smart Tourism is still limited, not fully promoting the superior features. now available.

3.2.3. Significance of smart tourism development

For general travel:

– Is an important factor for global connection between countries, partners, businesses, units, individuals, tourist destinations...; contributing to improving promotion, advertising and forecasting tourism development activities;

– helps improve competitiveness, transparency and create a breakthrough in productivity, upgrading the tourism industry system;

– Contributing to the digital transformation of the tourism industry, helping the tourism industry leapfrog the boom of the 4.0 industrial revolution;

For Businesses:

– is an online promotion channel, introducing effective tourism products and tourism services from service providers to tourists quickly, effectively, professionally, with high pervasiveness, At the same time, it helps businesses perform well in operations, employee management, economical and highly competitive operations.

– helps tourism businesses receive feedback, customer reviews and make online payments.

– Helps businesses promptly connect with state management agencies on tourism and link between businesses quickly and promptly to handle situations that occur in tourism activities. to meet all the travel needs of domestic and international tourists, ensuring continuous operations without interruption, ensuring information security, minimizing costs, shortening time, and improving quality service, safety guaranteed.

For tourists: help tourists find out necessary travel information: tourist attractions, reputable and quality travel companies, itineraries, forms of transportation, hotels and restaurants, amusement parks location, tourist maps, weather, prices, currency conversion, online payment... effectively, saving a lot of costs and time...

4. SOLUTIONS FOR DEVELOPING SMART TOURISM IN VIETNAM

The development of digital technology is considered one of the advantages that helps Vietnam's tourism industry achieve its goal of being at the top of Southeast Asia. Based on the analysis of the current situation and limitations and difficulties in developing Smart Tourism in Vietnam, the author proposes some main solutions to develop Smart Tourism in a sustainable manner below:

4.1. Group of solutions from State management agencies

– Continue to well implement the contents of Resolution 08-NQ/TW dated January 16, 2017 of the Politburo on developing tourism into a key economic sector, Directive 16 of the Prime Minister dated May 4 /2017, on strengthening capacity to access the 4th industrial revolution; Realizing the Tourism Development Action Program for the period 2021 - 2025 dated August 13, 2021 of the Ministry of Culture, Sports and Tourism into practical tourism activities in the new period. "Building a digital transformation strategy, smart governance, prioritizing the development of digital technology, smart agriculture, smart tourism, and smart urban areas".

– It is necessary to develop synchronously and closely coordinate between the State - Businesses - Tourists on a widespread information technology and digital infrastructure system, upgrading high-tech applications that do not require GPS and 3G/4G//wifi/internet can still be used.

– Training quality human resources to develop smart tourism, with technological qualifications to adapt to the process of transformation and application of digital technology, especially for human resources at state management agencies and businesses. tourism industry, tourist attractions, tourism workers...

– Focus on developing science and technology, especially information and communication technology towards applications for the tourism industry, creating a technology foundation for Smart Tourism. Building digital database infrastructure, applying information technology, internet and cloud computing in the tourism industry based on integrating information sources from tourism issues to traffic and weather, manage visitor flow, destinations...

– Select pilot tourist destinations with developed socio-economic conditions, consistent with the requirements and development of information technology as pilot models for smart urban development and smart tourism cities, such as: Hanoi, Da Nang, Ho Chi Minh City, Thua Thien Hue.

– Research and learn from other countries with smart tourism models.

4.2 Group of solutions for tourism businesses

– Tourism businesses need to proactively update and invest in smart tourism development applications; Improve competitiveness, accessibility and online tourist care to meet the needs of the tourism market. Associate smart tourism development with related fields such as smart urban areas, smart energy management, smart transportation, smart agriculture, ...

– It is necessary to closely connect and share digital data between the tourism industry and other industries such as technology - communications, finance, banking, taxes, ... and there needs to be a close and smooth connection between tourists, tourism businesses and state tourism management agencies.

– Focus on researching the psychology, preferences, satisfaction, personalization of tourists... to increase the quality of tourism services towards the highest utility for tourists.

– The final solution mentioned in this article is information security – protecting the safety of personal and organizational data. Avoid intrusion or theft by crooks or hackers.

To improve competitiveness, tourist destinations must constantly adapt and develop a sustainable tourism ecosystem, co-creating value, to bring quality tourism experiences to tourists, as well as such as improving people's quality of life and benefits for stakeholders, developing a smart tourist destination ecosystem with smart infrastructure and technology, smart people, smart environment, ... to bring quality experiences to tourists, moving towards "green" and sustainable development.

5. CONCLUSION

Applying digital technology in the tourism sector is a priority direction for global tourism. In recent times, the Vietnam National Administration of Tourism has been focusing on researching digital transformation, focusing on developing the Smart Tourism model to become a rich "Tourism Ecosystem", bringing many benefits to tourists, businesses and management agencies, applying the achievements of science and technology 4.0 to tourism development activities.

In fact, the implementation of smart tourism in Vietnam still has many disadvantages such as: lack of specific guidelines and policies; The technological foundation is still weak due to limited resources, not being able to meet and keep up with advances in science and technology, and lack of connection between the subjects of smart tourism (government, businesses, tourists). guests and community) ...

In order for tourism to become a key economic sector of the country and towards the goal of sustainable development, the development of smart tourism is an inevitable trend, promising many growth opportunities, significantly contributing to improving tourism. Enhance the competitiveness of Vietnamese tourism with other countries in the world. Therefore, the entire tourism industry as well as localities, businesses, and tourists and the community need to join hands and contribute more decisively, focusing on implementing comprehensive digital transformation and building solid digital infrastructure, benefit sharing and mutual respect, besides that, there needs to be many timely and effective solutions for the development process to be ready to approach, deploy and adapt to smart tourism in future.

REFERENCES

"Smart tourism – opportunities and challenges for Vietnamese tourism" https://vietnamtourism.gov.vn/post/25018

"Smart tourism model – Highlight of green economic development, published on Economics & Urbanism", http://m.kinhtedothi.vn/mo-hinh-du-lich-thong-minh-diem-nhan-phat-trien-nganh-kinh-te-xanh-310544.html

An Nhi (2018),*"Smart tourism",* https://hanoimoi.vn/phat-trien-du-lich-thong-minh-596217.html

Cao Thi Phuong Thuy, Nguyen Thi Huong (2021), *Developing smart tourism in Vietnam in the context of the 4.0 industrial revolution*", Finance Magazine, issue 2, May 2021.

Chien Thang (2018), "*The explosion of online tourism and its impacts on Vietnam Tourism development*", http://www.itdr.org.vn/vi/nghiencuu-traodoi/1700-su-bung-no-cua-du-lich- truc-tuyen-va-nhung-tac-dong-toi-phat-trien-du-lich-viet-nam.html

Dang Tran Minh Hieu; *Current situation and solutions to implement digital transformation in distributing tourism products in Vietnam*; The 3rd International conference proceedings: commerce and Distribution-Code 2022; pages 166–176

Hoang Thi Hoai Huong, M.A Nguyen Thi Thuy Dung: *Digital Transformation in Business: Advantages and disadvantages*; The 3rd International conference proceedings: commerce and Distribution-Code 2022; pages 105–112

Le Quang Dang: "*Industrial Revolution 4.0 and the process of developing smart tourism in Vietnam",* http://itdr.org.vn/nghien_cuu/cach-mang-cong-nghiep-4-0-va-tien-trinh-phat-trien-du-lich-thong-minh-tai-viet-nam/

Hien, L (2023), "*Digital transformation and Vietnam destination marketing solutions to international market";* Anniversary international scientific-practical conference "Commerce 5.0 - digitalization and/or humanization", organized by University of Economics – Varna, Bulgaria. – 13.10.2023. Pages 327-340; ISBN 978-954-21-1160-3

Ministry of Planning and Investment; "*National digital transformation program to 2025, orientation to 2030"* (June 6, 2020)

Pham Huy Giao, 2020, *Digital transformation, nature, practice and application*, Petroleum Journal, No. 12 – 2020, pp. 12 – 16, ISSN 2615-9902

Pham Thi Thuy Linh (2020), "*Smart tourism – The inevitable development trend of Vietnam's tourism industry*", Industry and Trade Magazine, https://tapchicongthuong.vn/bai-viet/du-lich-thong-minh-xu-huong-phat-trien-tat-yeu-cua-nganh-du-lich-viet-nam-71954.htm

The application of technology platforms in smart tourism development; https://digital.fpt.com/en/industries/province-public-sector/smart-tourism-development.html

Contacts:
Le Thi Thu Hien PhD. Student,
Economic& Management Tourism
Work address: University of Economic Varna, Bulgaria
E-mail: le.hien@ue-varna.bg