



IMPACT OF DIGITALIZATION AND ARTIFICIAL INTELLIGENCE ON THE LOCAL TOURISM INDUSTRY

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Abstract:

The proliferation and integration of digital technology and Artificial intelligence have inevitably changed all aspects of our daily lives as they provide significant improvement and convenience. We could not stress enough the importance of digital technology, Artificial Intelligence, and its valuable contribution to the world. Digital technology has created worldwide worth around 443 billion dollars in the year 2021, a 396 billion increase in the year 2020, and forecast 2026 approximately 691 dollars. The tourism and travel industries have contributed to a world GDP of 10.2 percent (US\$ 7.6 trillion), approximately 68% of the tourist use their mobile phone to search for information. The commercial and tourism sector is improved by using artificial intelligence to boost their operational capabilities, optimize processes, and offer better service to the customers, and face-to-face customer services, using robots, the intelligence predictive application which is helping the customers related to the prices of hotels.

Keywords:

Artificial Intelligence, Proliferation, Digital, Technology, Tourism

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Introduction

The integration of new technology and artificial intelligence in the tourism sector, the sector of tourism is economically relevant, this is good for business operators, a new paradigm, and the tourists themselves and how they think about traveling. The word “digital tourism” means using digital tools how we can manage, organize, and enjoy the experience of travel. The sector of digital Tourism makes use of all tools of Digital transformation to change how this sector runs and how we travel.

The tourism concept is well-known and defined by “WTO” and inter-parliamentary union in 1998, stated that “It encompasses all free movements of persons away from their places of residence and work, as well as the service industries created to satisfy the needs resulting from these movements (WTO, 1989). The modern substitute must be considered, and the modern era has changed the whole tourism sector, as (Michalko said in 2001). The word tourism means an individual experience, related to an environment change, the services are provided. Tourism means when you spend time out of your or away from your home or move from out of the station, you can relax, and pleasure, while making use of the commercial provision of services, this was started in western Europe in the 17th, we can this is a modern social gathering or arrangement. Information technology played a vital role in boosting economic growth and developing this sector. The Internet played an important role in the late 1990s and dramatically transformed strategic and operational practices in the tourism industry (Khan, 1988). The first digital travel services appeared at the beginning of 2000, during the dotcom era. In 2021 the market value or size was boosted up, and approximately the expected worth was 443 billion dollars.

Approximately 396 billion dollars increased in 2020, and forecasting 2026 approximately 696 U.S dollars (Saba Ghani, April 21, 2021).

Digital and Traditional Tourism

The word “digital tourism” means the utilization of digital tools to arrange, manage, and joy the experience of travel. “Digital tourism” the

tools of digital transformation are used in how the sector itself runs and how the tourist travels. This might be a recommendation system to help someone find suitable accommodation during holiday planning (Ardissono et al 2003), a mobile application guide tour by using their smartphone while there (Abowd et al. 1997), or the ability to easily explore the holiday photography around a table once at home. Digital tourism is not new and permeates many of the online activities people gather today for trip planning using Expedient and TripAdvisor (Apted et al. 2006). The concept of digital tourism is not new and permeates many of the online activities people engage in today with trip planning using Expedient and TripAdvisor (Lemax, July 17th, 2018). In traditional tourism, depart from some random airport or bus station and begin your vacation. Most experienced travelers are adventurous and react to the unexpected with great enthusiasm, and this is about all you need for traditional tourism to work out well for you.

Problems Statements

The tourism industry is facing a lot of challenges around the world, currently, due to rising inflation and the cost of traveling, digital technology is playing a vital role in remote work and created a new niche in the tourism era, isolating the people, during the period of covid-19, and 62 million jobs were lost related to the tourism in 2020. According to Sustainable Travel International, tourism is responsible for about 8% of the world’s carbon emissions. For the travel and tourism industry, inflation is a huge concern. The tourists face a lot of challenges, no integrated type of information is facilitated from the government side and private, such as weather, and road information from the concerned department, the tourists face a lot of challenges in terms of parking, lack of Guidance from the agents, Hoteling fares and foods rates increase suddenly, no proper plan is structured for tourist on integrated type of platform, no budgetary plan is structured, no collaboration Between concern departments (Khan, 1988).

Systematic literature Review.

Emergence of Digital Tourism in Hungry and others countries

The former Hungarian Tourism Co. precise the ratio of 'online production'. By analyzing this data in our country in 1997 1% of the population had internet access. According to which in 2010 and 2016 58% to 79% population had internet access. In 2003, 7% of all hotels and 6% of guesthouse bookings were running online, but the rate of payment method did not reach 1%. However, 8% of hotels and less than 1% of guesthouses were giving online services to their customers. In 2004, it was possible in 52% of domestic hotels and 25% of guesthouses to book rooms online. In the same year, 86% of the hotels, and 70% of the guesthouses had Internet access while 70% of the hotels and 50% of the guesthouses created and operated their website (eNET Internet Research and Consulting Ltd., 2004). According to Sziva and Nemeslaki (2016), tourism was already present in e-specific industries in 2004, mostly in the field of online marketing but was left behind in all areas requiring more complex ICT applications. In 2012, 45% of total domestic accommodation revenue, was about 58 billion HUF (Zsuzsanna Ivancsó-Horváth, 2018).

Different countries Digital Tourism Activity

Spain received 83 million international tourists in 2019, which contributes 12% of the national GDP and employs 2.83 million people in our country. The government allocates 216 million euros for the digitalization, innovation, and internationalization of the tourism sector. 29% of online travel reservations to Spain are made through mobile phone applications. Digital tourism is giving facilities to all stakeholders of tourism in Indonesia, in respect of licenses, tourism activity, and providing information related to the tourism destination Indonesia.

Tourism is a socio-economic activity that charges the global society. A tourism website is a major tool for promoting tourism by giving important information to tourists. This is a plan of Indonesia Govt 2017 plan and is

considered one of the top priorities. Indonesia has maintained the 42nd rank on the competitive index with a powerful performance in the pricing area (5th), Natural Resources (14th), and 91st rank in ICT readiness. This report shows that travel and tourism were competitive in 2019, and there were a total of 136 countries. Tourism is a large global industry, both in terms of the number of participants and in terms of overall expenditure. According to the UN World Tourism organization, the arrival of tourists recorded in 2010 was approximately 939 million, 980 recorded in 2011 and one million exceeded in 2012 (UNWTO 2011).

Digital Tourism Analysis of Tourism Website

According to the Indonesia government plan 2017, tourism is the top priority in respect of development, the other sectors could be, Economic zones, Industrial zones, Maritime, energy, and food. According to the 2019 report, 20 million foreign tourists visited, while 275 million were domestic tourists. The tourist sector earned approximately 260 trillion Indonesian Rupiah. The tourism sector has changed due to the internet, the tourists can get information related to tourism and travel from different platforms. The tourism sector is creating an impact economy also (Fajar Kusnadi Kusumah Putra, 2018).

Integration of technology in Tourism Industry

The variety of tourism sectors enabled the sectors to adopt advanced technology in different areas. "AI", virtual reality, and such advanced technology are contributing to the digital transformation of the tourism sector. The virtual tour is boosted by using technology such as Google's "Tour Creator". Using a virtual tour, you can see the seven most beautiful of the worlds like Petra, Taj Mehal, and the Wall of China. Using digital safari, you can check or take a virtual hike of the famous landmark. Chabot's and virtual assistance. It is booming by using companies online to upgrade Customer services, decrease costs, and improve the speed reposed time. Around 1.4 billion people utilize Chabot which can give the response of 80% of quality questions.

Technology boosting up digital tourism economy

In Nov 2020, the executive agency for small and medium enterprises introduced the call for proposals, increasing the use of digitalization, and advanced technology in the Tourism sector using transnational cooperation and capacity building. Its purpose was to assist tourism small and medium enterprises lead the tourism recovery through technological solutions and innovation. Like “EU Digit OUR”, “SMARTER AOE EURO-EMOTUR”, “DIGITOUR”. If we look at the past in the 1050s and want to book a ticket, this process was done manually, and it would take 90 minutes, and the cost of the ticket would be more than today in real-time. On the other side of the digital age, you can book a ticket in seconds, and the whole trip can be organized in a minute. According to the United Nations Travel Organization, fifty-two percent of smartphones are owned in the region of Specific Asia, and social media is looking like a customer services upgrade tool for Hospitality. For the consecutive sixth year, according to the World Travel and Tourism Council, travel and tourism contributed to world GDP outpaced the global economy, rising to a total of 10.2 percent (US\$ 7.6 trillion). The Tourism industry and Travel have shared the world Gross Domestic Product (GDP) of around 10.2 percent (7.6 trillion). In 2019, before the pandemic stopped Travel in its tracks, the Travel & tourism sector generated nearly \$9.2 trillion to the global economy. the sector could create 58 million jobs in 2022, to reach more than 330 million, just 1% below pre-pandemic levels and up 21.5% in 2020 (Putra et al., 2018).

Digital trends in tourism business management

The virtual reality in the tourism industry has too much improved. Regardless of destination or hotel, guest, can immediately access their destination and get a taste of their next vacation. The digital trend in the Tourism sector is on the way to digitalization, so there is now a lot of commonplace where the tourist can use digital to boost their mood. Around 68% use their

smartphone to get information, and 42% of respondents, on the other side. Around 38% post their comments and updates on dedicated applications & websites. The tourists more such thing to improve. The Hotels must live up to these expectations, and in doing so, and digital platform is improving day by day. There are many Hotels with advanced digital solutions, so this can make their guest memorable days or vacations (March 6, 2022, by Shoocal).

Promoting digital tourism business models and ecosystem

Digitalization created an impact on the cultural tourist sectors, in respect of demands and supply. The advanced digital technology facilitated to the tourist with modern mobile services, which amplified the cultural experience, on the other side, they accelerated the development of new business models by digital enterprises. The methodology to identify, characterize, and break down into a particular part of digital products for cultural tourism, there are app-based services. This is for value creation proposition and capture to identify the distinctive features of business models. The framework is divided into three parts, “how to exploit mobile app features to create value for cultural tourists” (Value Creation), “which valuable services are delivered to cultural tourists” (Value Proposition), and “how companies are rewarded for the value they offered” (value capture). Authors use the framework to perform a situation analysis of App-Based Services in the cultural tourism market (Ulkhay et al., n.d). The ICT-based solutions help the decision-making process, along with the tourism experience lifecycle, support the performing of travel activities, and improve the cultural experience of the travels (Ammirato et al .2015).

Artificial Intelligence based translation in the Tourism Industry

The tourists are involved in contact with various languages. Therefore, language represents one of the biggest barriers for tourists when it comes to traveling and seeing the world. AI in the travel industry also has applications in language

translation. Machine translation helps tourists to travel. Intelligence systems and applications have been developed for machine translation and simultaneous translation, using natural language and machine learning. AI translation in tourists helps to ensure that language differences do not limit the travelers (Marisol Letelier et al., 2018). The Artificial Intelligence in the Tourism Industry the many new technologies that appear in the new era of Artificial intelligence. This technology helps the customers deliver a unique experience, this advanced technology is helping more in the tourism sector with Facial Recognition Technology, audio tours, the language translator, the most user-friendly application is Catboats, the virtual reality application, etc. (Patel, 2028). The “Virtual Reality Technology” is mostly used to create a simulated environment. This gives a virtual reality experience to the tourist. The tourist used virtual technology to experience the environment substantially in 3D, the Digital World (gutting, 2010). The Chabot’s like a software type that helps in communication in auditory or text form method, like Chabot’s message-based and voice-based communication. The most user-friendly and provides facilitation, like hassle-free check INS at security point to the tourist facial recognition application technology, the tourist clears all the stations without checking the document by the concerned department. This software provides safety and security for tourists using blockchain technology (Chang and Yang, 2008; Patel, 2018)

Conclusion

By using digital technology and artificial Intelligence the tourism system has tremendously increased. It has made easier the workflow for human beings. The use of digital technology and artificial intelligence tools has transformed tourism across the globe. Digitalization artificial intelligence has offered multiple opportunities for the availability of new markets and modern travel services. Digitalization & artificial intelligence is massively changing the socio-economic culture in the world, especially in the travel and

tourism industry. Digital technology has created worldwide worth around 443 billion dollars in the year 2021, a 396 billion increase in the year 2020, and forecast 2026 approximately 691 dollars. The tourism and travel industries have contributed to a world GDP of 10.2 percent (US\$ 7.6 trillion), approximately 68% of the tourist use their mobile phone to search for information. Interlinking the different departments and their objectives is designed to serve as a "shared blueprint for peace and prosperity for people and the planet now and into the future. Digital technology can be helpful for tourists in their capacity building in the context of economic wellbeing, and value edition.

Way Forward for Tourism Policy Maker

- By integrating different departments, information reaches the tourists, and the trust of the tourists will boost the system, and the tourism industry will increase.
- By nexuses of different departments with digital tourism like government and local governments, rescue department should facilitate, motor way department should update related to roads, Climate departments will update about the weather, the tourism department will collect information from every concerned department and update on digital tourism website, Other information like booking, return to Home information will be provided online.
- The residential, parking, Hoteling, and visiting places Information will be on the digital tourism website. On the spot this can be facilitated at all levels’s government will be involved.

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