Journal of Next-generation Convergence Information Services Technology Vol.11, No.4, August (2022), pp.431-442
ISSN 2384-101X(p) 2672-1163(e) *http://dx.doi.org/10.29056/jncist.2022.08.08*

Harnessing Technology in the Evolving Tourism Servicescape during the Post-Covid-19 Era

Arnelyn M. Torres[1]

Abstract

The tourism industry is reopening after two years of disruption due to the COVID-19 pandemic. With its re-emergence, new ways of welcoming, receiving, and serving tourists and visitors will be necessary to restore their travel confidence. Governments and destinations should address tourists' health concerns and reassure them to feel at ease, secure, and safe while traveling. This paper argues that technology is an essential strategic partner for redesigning the tourism servicescape. A tourism servicescape combines products, places, services, and activities that contribute to tourists' overall experience. It also includes the interactions between tourists and several organizations at different touchpoints. This study attempts to redesign the tourism servicescape in the Post-Covid-19 by leveraging technology and aligning it with service delivery and interaction. Five technology pillars would facilitate a new service landscape in the travel and tourism industry. For each of these pillars, the author explores how to harness technology and how it can benefit organizations, businesses, and tourists. Technology will likely play an essential role in realigning tourism services and business models in the post-COVID-19 era.

Keyword : technology, tourist experience, immersive technologies, digitized identification and passes, contactless

1. Introduction

Digital technology plays a vital role in service contexts [1] and has changed the foundations of service organizations. Nowadays, technology is crucial to front-line services such as taking reservations, booking hotel rooms, checking in for flights, and taking orders at restaurants. Parasuraman [2] points out that technology is essential to the service pyramid model. Digital, visual, and information technology have transformed all service experiences [2]. Technological advancements have helped provide service organizations with innovative solutions that enhance the customer experience. For instance, the Internet of things (IoT), near-field communication (NFC), artificial intelligence (AI), and 5th Generation (5G) technologies enable the service sector to build unique digital encounters. Many companies in tourism, such as online travel agencies (OTA), are operating within digital platforms to provide immediate and real-time customer service.

1 Department of Tourism Management, Keimyung University, Daegu, South Korea [Professor]
e-mail: arnelyn.torres@kmu.ac.kr

Received(July 6, 2022), Review Result(1st: July 26, 2022), Accepted(August 12, 2022), Published(August 31, 2022)

Technology disruption persisted even during a pandemic. During the coronavirus disease COVID-19 epidemic, it is apparent that people use technology more than ever [3]. Technology was essential in monitoring the spread of infection and ensuring public safety, so it has intensified the need for more digitized, technological, and remarkably safe sectors [4]. In the tourism industry, travel precaution has prompted technology to ensure the safety of tourists and stakeholders. For example, Global Positioning System (GPS) technology enables the tracking and tracing of tourists, passengers, and other visitors [5]. Electronic commerce (e-commerce) is preferred for ordering and buying goods. While cities, hotels, and bars more widely use robotics and artificial intelligence to minimize the spread of COVID-19.

Tourism have reopened two years after the COVID-19 disruption. Tourists, businesses, and stakeholders in public and private sectors must develop innovative ways to adapt to the Post-COVID-19 tourism era and regain back travelers. Accommodation businesses, transportation companies, restaurants, entertainment venues, recreation centers, and other businesses relying on tourists must understand the implications of safety and health concerns on tourists' attitudes, decisions, and behaviors. To effectively provide tourism and travel services that respond to tourists' needs and demands in the Post COVID-19 era, a rethinking of the service landscape is required to create an environment that matches tourists' expectations. Tourism servicescape encompasses the physical, social, natural, cultural, and technological elements that foster customers' cognitive and affective responses.

The optimal redesign of the tourism servicescape should be a holistic approach. However, this paper emphasizes restructuring the technology dimension, which is expected to substantially impact the physical, social, natural, and cultural dimensions. Harnessing technology is a strategic way of traversing organizational and industry boundaries to influence customers' perceptions of technological capabilities to bolster tourists' confidence, decrease in-person interactions, facilitate fast travel clearance, improve service delivery and create enhanced experiences. Tourism practitioners must understand technology's roles in driving business performance and identify new business opportunities. Furthermore, a deeper understanding of technology's role in the tourism services landscape allows for formulating sustainable management strategies. The most significant impact on travel and tourism services can only be achieved through stakeholder collaboration.

2. Background of Study

2.1 Tourism and COVID-19

Tourism has grown and diversified steadily over the past few decades, becoming one of the

fastest-growing sectors of the global economy. Tourism grew relatively due to the robust global economy, rising middle classes, rapid urbanization in emerging market countries, ease of travel and visa facilitation, technological advances, and new business models [7]. Nevertheless, growth suddenly stopped due to the COVID-19 virus that started in the last month of 2019. It has dramatically affected the global tourism industry. Local and regional lockdowns and travel restrictions have affected international and local lodging businesses. Transportation industries such as air, water, rail, land transport, restaurants, entertainment and recreational places, festivals, and sports events have suffered drastically. Secondary sectors such as shopping centers, duty-free shops, and event places have also been affected. On the other hand, this deadly disease has caused people to fear contamination by virus, health and safety concerns, and a loss of confidence to get out of their house or take trips, causing travel to decline and the economy. Tourism experienced the worst year in history due to the health crisis in 2020 [8].

2.2 COVID-19 and Travel Behavior

Even under COVID-19, the human desire to travel remains strong in conjunction with the desire for new and diverse experiences [9]. However, COVID-19 is deadly; it causes fear and apprehension among travelers and tourists. Therefore, in choosing a destination, travelers and tourists prioritize health and safety [10]. Under COVID-19, personal safety is paramount. People avoid crowded areas and prefer less populated destinations [11]. They carefully choose hotels [12][13] and select room service [14]. Since safety is also a priority, they prefer contactless services because it implies a safe travel experience [14]. Buffet services are avoided [12]. Most people prefer takeout to indoor dining [12]

2.3 COVID-19 and the Technology

Technology played a prominent role in COVID-19, notably in the tourism industry. Along with innovation, it has become a powerful tool in the tourism industry's pursuit of economic recovery [15]. Governments, institutions, businesses, and people alike depend more on technology. In particular, South Korean authorities have implemented tools for aggressive contact tracing, using security camera footage, facial recognition technology, and global positioning (GPS) data from vehicles and mobile phones [16]. Institutions and businesses have innovated their service operations through the adoption of various technologies such as mobile apps, self-service kiosks, robots, electronic commerce (e-commerce), the Internet of Things (IoT), and artificial intelligence (AI) to combat the spread of disease.

Before the pandemic, tourists had different perspectives on their acceptance of new technologies and

their attitudes towards them [17]. However, for their health and safety, tourists appear to be very responsive to technological advances [18]. Most people have used smartphone apps for all their personal needs, such as ordering cooked food, online shopping, transportation ticket reservation, payment, and even receiving updates on COVID-19.

2.4 Tourism Servicescape

The tourism industry encompasses accommodations, adventure and recreation, attractions, events and conferences, food and beverage, tourism services, transportation, and travel trade where customers receive products and services. Additionally, the services encompass facility design, interactions with service providers and other customers, ambiance, signs, online and offline communication, and websites [19]. A service environment can assist service providers in influencing customers' perceptions of the service and, in turn, be an instrument to influence customer behavior [20].

Several studies demonstrate the influence of servicescape on customer emotions. According to Bitner, [21] the physical servicescape positively impacts customers and employees regarding their emotional, cognitive, and physiological responses. Similarly, Reimer and Kuehn [22] indicate that servicescape facilitates cognitive and affective responses in the customer. Kim and Moon [23] highlight that physical environments can positively impact consumers' emotions since triggers produce feelings. Therefore, customers are likely to respond positively to an environment that creates a sense of safety within a space with defined spatial and temporal boundaries [24].

According to Parasuraman [2], technology plays a crucial role in the operation of service organizations. Kandampully, Bilgihan, Bujisic, et al. [25] confirms this perspective by stating that technology is an indispensable partner in creating a positive customer experience. Additionally, the authors assert that technology has the unique ability to integrate marketing, management, and operations within a company to focus on the customer. Their most significant point is that technology can traverse organizational and departmental boundaries to focus on customers' positive experiences.

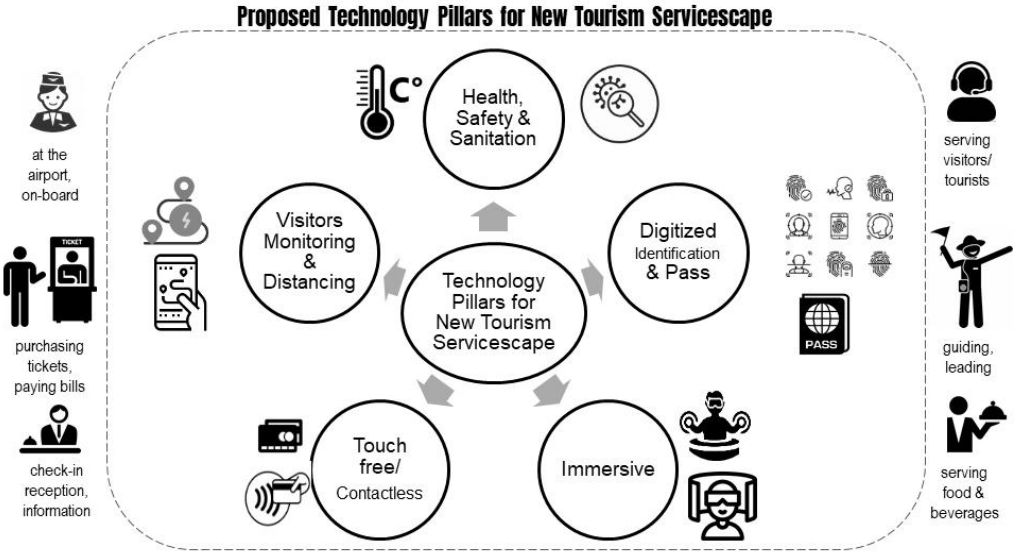
3. The Evolving Tourism Servicescape

The evolving tourism servicescape conceptual model is informed by tourism science, business management, and information technology disciplines. To understand the tourism industry from a macro perspective, documents relating to private and public organizations' policy responses, recovery strategies, and press releases were reviewed. Information was gathered from trade journals, the World Travel and

Tourism Council, United Nations Conference on Trade and Development, Organization for Economic Cooperation and Development, and country-specific websites. This project primarily focuses on utilizing technology to prevent the spread of the disease, conduct health checks, manage social distance, and trace contact information.

The micro-level perspective focused on business reports, conference proceedings, and journal articles. A review of publications relevant to COVID-19 topics, such as tourism, business operations, and ICT, has been conducted through Google Scholar, Emerald Insight, and ScienceDirect. The current business practices and processes of tourism-based businesses in the context of COVID-19 and how technology was utilized to accomplish their goals are examined. Research methods include desk research, consulting with IT experts regarding emerging technologies, interviewing tourists who traveled during COVID-19, and practical observations throughout the research process.

The evolving tourism servicescape model incorporates five technology pillars, as shown in [Fig. 1]. Its key components are health, safety, sanitation, digital identification and pass, immersive experiences, touch-free or contactless, and monitoring and distancing critical to developing an upcoming tourism service landscape.



[Fig. 1] Technology Pillars for New Tourism Servicescape (author's interpretation)

The five technology pillars intend to support travel and tourism services such as transportation, lodging, food and beverage, resorts, and recreation venues to manage tourists comprehensively. The

adoption of innovative technology aims to enhance safe, fast service delivery regardless of whether sole technology is used or technology with human assistance. The co-creation of new and additional services at different touchpoints with the aid of technology is expected to promote sustainable and responsible behavior by tourists and providers. Likewise, they are both expected to take responsibility for reducing the negative effect of tourism.

3.1 Health, Safety, and Sanitation-related Technologies

Tourism companies should prioritize health and safety measures to return to normal operations as the industry reopens slowly. There are no qualms about providing a clean environment for tourists and alleviating their health concerns. Each country's government plays a lead role as it may mandate specific business guidelines; however, organizations implement rules in a way that fits their unique situation.

Airports, lodging establishments, restaurants, shopping malls, museums, and train stations are some examples of tourism venues that should conform to government hygiene standards and ensure strict cleanliness and sanitation. The transport operators, travel hub administrators, accommodation providers, and other public area management organizations are to use various technologies to monitor safety and health conditions along the tourist journey. Many airports worldwide have implemented thermal scanning devices as one of the many preventive safety measures, such as at Incheon airport. Aside from thermal scanning devices, robots and kiosks can measure travelers' temperatures and warn people when they reach high levels.

Virus transmission through high-touch surfaces and high foot traffic areas is an issue of concern. Businesses and tourist venues should install IoT devices in public restrooms. The integration of restroom hardware with online data collection systems allows real-time monitoring, tracking, and identifying problems before they occur. IoT-enabled dispensers, such as paper towels, tissues, or sanitizer, eliminate the guesswork of restocking and help prevent runouts. Public restrooms can be equipped with touch-free technologies with movement sensors to reduce the risk of disease transmission. These devices include toilet flushes, water faucets, soap dispensers, hand dryers, and sanitizers. Maintaining an adequate stock of toilet amenities for hygiene and digitally monitoring washroom and toilet conditions is vital.

3.2 Digitized Identification and Passes

Visitors and service providers can benefit from digital identification and passes (DIPs). A digital identity is a collection of verified digital attributes and credentials that people use online, similar to their

real-world identity. The features can be a unique identity number, social security number, name, place, date of birth, citizenship, and even biometric data used to authenticate its owner. Traditionally passengers checking in for their flights need to bring proof of identification, such as an Identification Card (ID) for domestic travel or a passport for international travel, which may be prone to virus transmission. In addition, they must have their flight tickets printed, and some countries require visas, so they must attach them to their passport. Using digital identification passes instead of passports, e-passports, or digital identity controls [15] for cross-border travel has gained popularity as it is a quick and seamless process. Tourists would find it convenient if they could use their smartphones, tablets, and laptops to access electronic flight tickets and e-visas.

The digital health passport or app facilitates quick and seamless international travel clearance. To prepare for this digital health passport or app, travelers can use the Internet to familiarize themselves with COVID-19 tourism policies to save time and avoid long queues when they depart or arrive. It is crucial to check safe travel requirements wherever the trip starts and ends because each country has its prerequisites. Border gates screen travelers when entering or leaving a venue or country. It may include measures such as interviews, temperature checks, and evaluation of symptoms. The venue, destination, and government may require COVID-19 testing before departure or arrival, while some countries require vaccination certificates. Travelers who have completed all vaccinations or possess proof of CoV-2 vaccination may be exempt from specific requirements, including testing and quarantine. Vaccination records are uploaded using a mobile app and AI and displayed using a QR code or biometric identity. They are interoperable across countries to increase safe travel [26].

Technology like DIPs is reliable, easy to use, and convenient, especially when dealing with transactions that require traveling identification, such as passports, PCR test results, vaccine certificates, health passports, visas, and biometrics. DIP can make traveling safer, less human contact, and more convenient.

The digitization of travel-related forms, such as health questionnaires, health declarations, and customs declarations can reduce the number of touchpoints upon arrival at the destination. In addition, the paperless nature of DIP is good for the environment.

3.3 Immersive Technologies

Tourism confidence is difficult to reclaim after the pandemic and is still being re-established in some areas. However, immersive technologies can potentially entice them back as they offer an engaging experience. Immersive technologies are innovations that redefine and revolutionize the staging of

experiences and co-create value in travel and tourism [27]. It is a technology that allows the blurring of digital and real worlds while providing a sense of immersion [27]. The most prominent examples of immersive technologies are augmented and virtual reality (AR and VR). Tourism, travel and hospitality companies typically use virtual reality for airline and hotel bookings and tours. Augmented reality enhanced real-world environments through overlays such as customer reviews at a restaurant, a hotel map, finding additional information about nearby attractions, interactive 3D maps, 360 degrees videos to present a resort, cruise ship, or tourist destination. As some tourists want unique and exciting experiences, technology experts can develop mobile tourist guides to support tourist experiences on the move. Immersive technologies can help personalize experiences along the tourist journey through their interactive, value-added, and co-creative characteristics [28].

3.4 Touch-free or Contactless Technologies

Interpersonal interactions and personal touch have traditionally shaped tourist experiences. During and after COVID-19, tourists and customers demand touchless, innovative ways to avoid physical contact; thus, customer service has changed the notion of 'human touch' [29]. There are many touch-free or contactless interaction options, including mobile phones. The tourism services are seamless with Near Field Technology (NFT), Radio Frequency Identification (RFID), and Bluetooth beacon technology. They are data sending and receiving systems that can help improve the quality of service in the travel journey. Travelers and tourists alike can use mobile technology such as smartphones, tablets, or Ipads as they are conduits for RFID, NFC, and beacons.

Travelers and tourists have much to gain from these technologies. Using NFC, a label containing the necessary information, such as passwords, can be scanned to reveal the location and provide access to the Wi-Fi network. Radio Frequency Identification (RFID) is a technology that does not require a visible product to recognize and works remotely to track supplies of materials and goods. RFID is used to monitor assets and valuables such as luggage at the airport. RFID tags are similar to barcodes but use radio waves to transmit information over short distances. Bluetooth beacon technology connects the available data to enable tourists to get information through smartphones [30]. With a smartphone app, travelers at the airport can find their departure gate, search restaurants, as well as receive location-aware and boarding alerts. At hotels, guests can opt for self-check-in, navigate hotel facilities, and locate nearby shopping malls or attractions. Likewise, customers can order food in advance and pick it up at restaurants.

At different tourist touchpoints, self-service kiosks (SSKs) can offer seamless and contactless services.

Travelers can use SSK to check-in for flights, print boarding passes and baggage tags, and pay excess baggage fees. Hotels can set up SSK in their lobbies. Passengers may wait to be attended by ticket sellers or proceed to the SSK.

Fast-food restaurants commonly use these SSKs to order, select their preferred language, and avoid miscommunication with human order takers. To illustrate, Ashley's, a chain of restaurants in South Korea, uses SSK instead of service staff taking walk-in reservations and queuing customers. Using SSK, customers can encrypt their mobile numbers and receive information about their waiting times. In some restaurants, customers can browse and order food and drinks at the table using iPads or tablets while the robot delivers the food. The same holds for room service. Ipads and tablets are also available in medical tourism clinics, spas, and hair salons. Customers and patients can choose services and treatments, receive details about treatments, and sign electronically.

Contactless technology plays a significant role in reshaping the tourism service landscape. Throughout their journey, tourists receive excellent service without having to interact face-to-face. Digital signage, interactive maps, voice-activated elevators, and motion-activated lighting are some examples. With the digital sign, passengers can see flights, train schedules, and bus schedules in real-time; passengers will not miss flights or experience boarding delays. In large areas, digital signage can provide directions to where people need to go. Interactive digital maps can create a virtual concierge or information desk. It can be set up in shopping malls, airports, and exposition venues to give directions. People are often wary of touching surfaces because they are worried about spreading viruses. Adopting voice-activated elevators, motion-sensor lighting, and electronic gates can increase convenience and safety.

3.5 Visitors/tourists Monitoring and Distancing Technology

In the context of tourism, physical distancing can reduce virus transmission. In some venues, there are some practices today that limit guests' ability to interact closely. Several solutions can be implemented to reduce physical distance, including fewer people using public transportation and marking where they must sit, adding floor markings and signage, and limiting the number of people at a table.

Airports, recreational centers, rest stops, and other places with high traffic can become very crowded and prevent establishing a physical distance. The use of monitoring solutions such as SafeCount and Zanwave enables organizations to accurately count people, manage spaces, recognize the activity, and identify restroom availability to minimize overcrowding.

4. Conclusion

The proposed integration of advancing technologies into the evolving tourism servicescape is crucial to the reopening and resetting of travel and tourism. The five technology pillars are expected to impact industry, organizations, businesses, and tourists. Health, safety, and sanitation technologies are expected to restore tourists' confidence. Tourism organizations and companies that adhere to health, safety, and sanitizing practices establish trust and a sense of security. Adopting digital identification and passes will allow for easier and faster flight check-in and improved travel clearance.

Furthermore, it will enable easy access to premises, creating customer satisfaction. Tourists eagerly await the return to travel, and immersive technologies can make their travel experience more rewarding and memorable. Visitors prefer touch-free or contactless technologies because they find them more efficient and convenient. Additionally, they enjoy co-creating values and experiences. Organizations, businesses, and tourist attractions involved in tourism must invest in solutions that monitor and manage disease outbreaks so that tourists are assured that disease outbreaks are prevented. By doing so, they can showcase responsible tourism.

Adopting technologies in the evolving tourism service landscape may enhance or constrain employee and tourist interaction behaviors. Understanding the evolving service environment from the perspective of businesses, organizations, and tourists is essential to implement change using an innovative design framework successfully.

Travel and tourism are geared toward digitalization, but human interaction cannot be eliminated since humans are the essence of service. A hybrid service or combination of humans and technology should also be considered. Not all tourists are technology savvy and comfortable using technology. Thus, businesses should give their customers the option to be served. Even though technology is expected to continue to influence the tourism industry for the foreseeable future, we cannot disregard the importance of human resources, resulting in hybrid customer service approaches.

References

[1] B. Lariviere, D. Bowen, T. W. Andreassen, W. Kunz, N. J. Sirianni, C. Voss, N. V. Wunderlich, A. De Keyser, "'Service Encounter 2.0': an investigation into the roles of technology, employees and customers", Journal of Business Research, vol. 79, October 2017, pp. 238-246, doi: 10.1016/j.jbusres.2017.03.008.

[2] A. Parasuraman, "Technology Readiness Index (TRI): a multiple-item scale to measure readiness to embrace

new technologies", Journal of Service Research, vol. 2, no. 4, May 2000, pp. 307-320, doi: 10.1177/109467050024001.

[3] V. Bogicevic, S. Seo, J. A. Kandampully, S. Q. Liu, N. A. Rudd, "Virtual reality presence as a preamble of tourism experience: the role of mental imagery", Tourism Management, vol. 74, October 2019, pp. 55-64, doi: 10.1016/j.tourman.2019.02.009.

[4] S. Rahimizhian, F. Irani, "Contactless hospitality in a post-Covid-19 world", International Hospitality Review, vol. 35, no. 2, December 2021, pp. 293-304, doi: 10.1108/IHR-08-2020-0041.

[5] U. Gretzel, M. Fuchs, R. Baggio, W. Hoepken, R. Law, J. Neidhardt, J. Pesonen, M. Zanker, Z. Xiang, "e-Tourism beyond COVID-19: A call for transformative research", Information Technology & Tourism, vol. 22, no. 2, June 2020, pp. 187-203, doi: 10.1007/s40558-020-00181- 3.

[6] Y. Sun, Y. Shao, E. H. W. Chan, "Co-visitation network in tourism-driven peri-urban area based on social media analytics: A case study in Shenzhen, China", Landscape and Urban Planning, vol. 204, December 2020, pp. 1-12, doi: 10.1016/j.landurbplan.2020.103934.

[7] United Nations World Tourism Organization, Covid-19 and Tourism-2020, unwto.org, https://www.unwto.org/covid-19-and-tourism-2020, Retrieved: December 12, 2021.

[8] United Nations World Tourism Organization, "Vaccines and Digital Solutions to Ease Travel Restrictions", unwto.org, https://www.unwto.org/news/vaccines-and-digital-solutions, (accessed December 12, 2021).

[9] O. Yeung, "K. Johnston, Resetting the World with Wellness", globalwellnessinstitute.org, https://globalwellnessinstitute.org/industry-research, (accessed December 12, 2021).

[10] M. Ivanova, I. K. Ivanov, S. H. Ivanov, "Travel behavior after the pandemic: the case of Bulgaria. Anatolia", vol. 32, no. 1, April 2021, pp. 1-11. doi: 10.1080/13032917.2020.1818267.

[11] M. I. Awan, A. Shamim, J. Ahn, "Implementing 'cleanliness is half of faith' in re-designing tourists, experiences and salvaging the hotel industry in Malaysia during the COVID-19 pandemic", Journal of Islamic Marketing, vol. 12, no. 3, May 2021, pp. 543-557, doi: 10.1108/JIMA-08-2020-0229.

[12] A. Guha, "This is what the new normal of travel may look like after COVID-19", travelandynews.com, "https://travelandynews.com", (accessed December 12, 2021).

[13] N. P. D. U. Dewi, Tourism education in a new normal era, Jayapangus Press Books, 2020.

[14] S. Y. Bae, P. J. Chang, "The effect of coronavirus disease-19 (COVID-19) risk perception on behavioral intention towards 'untact' tourism in South Korea during the first wave of the pandemic", Current Issues in Tourism, vol. 24, no. 7, July 2020, pp. 1017-1035, doi: 10.1080/13683500.2020.1798895.

[15] M. Sigala, "Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research", Journal of Business Research, vol. 117, September 2020, pp. 312-321, doi: 10.1016/j.jbusres.2020.06.015.

[16] S. Cha, "S. Korea to test AI-powered facial recognition to track COVID-19 cases", reuters.com, https://www.reuters.com/world/asia-pacific/skorea-test-ai-powered-facial-recognition-track-covid-19-cases-2021-12-13/, (accessed December 21, 2021).

[17] S. Ivanov, C. Webster, "What should robots do? A comparative analysis of industry professionals, educators, and tourists", Information and communication technologies in tourism 2019, January 30-February

1, 2019, Nicosia, Cyprus, pp. 249-262, doi: 10.1007/978-3-030-05940-8_20.

[18] L. Zhong, S. Sun, R. Law, X. Zhang, “Impact of robot hotel service on consumers' purchase intention: a control experiment”, Asia Pacific Journal of Tourism Research, vol. 25, no. 7, February 2020, pp. 780-798, doi: 10.1080/10941665.2020.1726421.

[19] J. Kandampully, T. C. Zhang, E. Jaakkola, “Customer experience management in hospitality: A literature synthesis, new understanding, and research agenda”, International Journal of Contemporary Hospitality Management, vol. 30, no. 1, January 2018, pp. 21-56, doi: 10.1108/IJCHM-10-2015-0549.

[20] B. B. Dedeoglu, A. Bilgihan, B. H. Ye, P. Buonincontri, F. Okumus, “The impact of servicescape on hedonic value and behavioral intentions: the importance of previous experience”, International Journal of Hospitality Management, vol. 72, June 2018, pp. 10-20, doi: 10.1016/j.ijhm.2017.12.007.

[21] M. J. Bitner, “Servicescapes: the impact of physical surroundings on customers and employees”, Journal of Marketing, vol. 56, no. 2, April 1992, pp. 57-71, doi: 10.2307/1252042.

[22] A. Reimer, R. Kuehn, “The impact of servicescape on quality perception”, European Journal of Marketing, vol. 39, no. 7/8, July 2005, pp. 785-808, doi: 10.1108/03090560510601761.

[23] W. G. Kim, Y. J. Moon, “Customers' cognitive, emotional, and actionable response to the servicescape: a test of the moderating effect of the restaurant type”, International Journal of Hospitality Management, vol. 28, no. 1, March 2009, pp. 144-156, doi: 10.1016/j.ijhm.2008.06.010.

[24] V. Blumenthal, Ø. Jensen, “Consumer immersion in the experiencescape of managed visitor attractions: the nature of the immersion process and the role of involvement”, Tourism Management Perspectives, vol. 30, April 2019, pp. 159-170, doi: 10.1016/j.tmp.2019.02.008.

[25] J. Kandampully, A. Bilgihan, M. Bujisic, A. Kaplan, C. B. Jarvis, Y. Shukla, “Service transformation: How can it be achieved?”, Journal of Business Research, vol. 136, November 2021, pp. 219-228, doi: 10.1016/j.jbusres.2021.07.033.

[26] M. Khatib, O. Zohar, H. Haick, “Self healing soft sensors: from material design to implementation”, Advanced Materials, vol. 33, no. 11, February 2021, pp. 1-32, doi: 10.1002/adma.202004190.

[27] M. C. Tom Dieck, D. D. Han, “The role of immersive technology in Customer Experience Management”, Journal of marketing theory and practice, vol. 30, no. 1, April 2021, pp. 108-119, doi: 10.1080/10696679.2021.1891939.

[28] T. H. Jung, M. C. Tom Dieck, “Augmented reality, virtual reality, and 3D printing for the co-creation of value for the visitor experience at cultural heritage places”, Journal of Place Management and Development, vol. 10, no. 2, June 2017, pp. 140-151, doi: 10.1108/JPMD-07-2016-0045.

[29] A. M. Torres, M. D. Sipe, “Hospitality Service Innovation: KLEEDing an Outstanding Guest Experience”, Journal of Next-generation Convergence Information Services Technology, vol, 9, no. 2, June 2020, pp. 149-162, doi: 10.29056/jncist.2020.06.05.

[30] N. Dragović, U. Stankov, Đ. Vasiljević, “Contactless technology as a factor of tourism industry development-a review of current practices and future directions. Economic Themes”, vol. 56, no. 2, June 2018, pp. 179-202, doi: 10.2478/ethemes-2018-0011.