

Prof. Dr. Erkan AKGÖZ - Lect. Bengü Su KARAGÖZ

DIGITAL DICTATORSHIP IN TOURISM

**(Algorithms, Surveillance and
Behavioral Engineering)**



SELÇUK
UNIVERSITY
PRESS

DIGITAL DICTATORSHIP IN TOURISM

(Algorithms, Surveillance and Behavioral Engineering)

Prof. Dr. Erkan AKGÖZ
Lecturer Bengü Su KARAGÖZ



DIGITAL DICTATORSHIP IN TOURISM

(Algorithms, Surveillance and Behavioral Engineering)

DECEMBER, 2025

Editors: Prof. Dr. Erkan AKGÖZ and Lecturer Bengu Su KARAGÖZ

ORCID: 0000-0001-6723-0271, 0000-0003-3259-8070

Cover Design & Layout: Tuğçe Delen

Selcuk University Press:

ISBN(PDF): 978-975-448-253-9

DOI: <https://doi.org/10.59726/SUPress/9789754482539>

Keywords: 1.Digital Dictatorship, 2.Surveillance Capitalism, 3.Algorithmic Power, 4.Behavioral Engineering

Cite This: Akgöz E. and Karagöz B. S., (2025), Digital Dictatorship in Tourism (Algorithms, Surveillance and Behavioral Engineering), Selcuk University Press.



SELÇUK
UNIVERSITY
PRESS

Selcuk University Press in under the body of Scientific Publications Coordinatorship.

Publisher: Selcuk University Press

Publisher Certification Number: 43463

Scientific Publications Coordinator: Prof. Dr. Tuncer ACAR

Addres: Selçuk Üniversitesi Yayınları, Alaeddin Keykubat Yerleşkesi, Akademi mah. Yeni İstanbul Cad.

No:369 Posta Kodu: 42130, Selçuklu-Konya/Türkiye

Web: yayinevi.selcuk.edu.tr

E-posta: yayinevi@selcuk.edu.tr

Phone: 0 (332) 241 00 41



This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0).
To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc/4.0/>



This license allows for copying any part of the work for personal use, not commercial use, providing author attribution is clearly stated.

Contents

List of Figures	iii
List of Tables	iii
INTRODUCTION	1
1 DIGITALIZATION IN TOURISM	2
1.1 Digital Transformation and Globalization	3
1.2 Digital Humanity/Citizenship	7
1.3 The Impact of Digitalization on Tourism.....	11
1.4 The Travel Experience Reimagined Through Technology	16
2 DIGITAL DICTATORSHIP	19
2.1 Concept of Digital Dictatorship	19
2.2 Surveillance Capitalism	21
2.2.1 Commodification of Behavior	22
2.2.2 Data Architecture: Digital Hegemony	23
2.2.3 Surveillance Marketing and Emotional Perception Management..	23
2.2.4 Erosion of Privacy and Ethical Concerns	23
2.3 Algorithmic Power	24
2.3.1 Influence of Algorithms on Decisions	24
2.3.2 Visibility Economy and Digital Hierarchy	25
2.3.3 Data-Driven Guidance and Standardization of Experience	25
2.3.4 Political and Ethical Dimensions of Algorithmic Power	25
2.4 From George Orwell to Zuboff: Readings on Digital Power	26
2.5 Rise of Digital Authority.....	27
2.5.1 Authority of Knowledge.....	27
2.5.2 Authority of Interpretation	28
2.5.3 Authority of Surveillance	29
3 THE JOURNEY OF ALGORITHMS: FROM RECOMMENDATION TO GUIDANCE.....	29
3.1 Mobile Applications (Airbnb, Booking, TripAdvisor, etc.)	30
3.2 Location-Based Tracking (Digital Trace)	32
3.3 Automated Decision Systems and New Travel Preferences.....	36
3.3.1 Neuromarketing.....	37
3.3.2 Algorithmic Advertising.....	41

3.3.3	Personalized Products and Services	43
3.4	The Power of Social Media Platforms	45
3.4.1	Vacation Perception on Social Media	50
3.4.2	TikTok and Instagram Tourism.....	51
3.5	Digitalization: Invisible Hand or Invisible Cage?	53
3.5.1	Data Privacy	55
3.5.2	Open Data Alternatives and Data Freedom	57
3.5.2.1	General Data Protection Regulation (GDPR)	59
3.5.2.2	KVKK (Personal Data Protection Law)	61
4	DIGITAL INEQUALITIES AND ACCESS ISSUES.....	62
4.1	Digital Minimalism.....	63
4.2	Analog Travel Movement	65
4.3	Global Inequalities in Technology Access.....	68
4.4	Destinations in the Shadow: Invisible Geographies	72
4.5	Language, Culture, and Code Barriers	74
5	A DIGITAL PERSPECTIVE ON THE FUTURE OF TOURISM.....	76
5.1	Digital Tourism: Freedom or Control?.....	76
5.1.1	Price Control	78
5.1.2	Rating and Review Monopoly.....	79
5.1.3	Commission Obligation.....	81
5.2	AI-Managed Tourism Experience.....	83
5.2.1	Visibility Algorithms.....	83
5.2.1.1	Commercialized Visibility.....	84
5.2.1.2	Inequality in Access to Information.....	85
5.2.2	Perception Management	87
5.3	Metaverse and Virtual Tourism	89
5.3.1	Addiction.....	90
5.3.2	Digital Identity, NFTs, and the Virtual Economy	92
	CONCLUSION AND GENERAL ASSESSMENT.....	94
	REFERENCES.....	96
	ABOUT THE AUTHORS.....	119

List of Figures

Figure 1. The History of Industrial Revolutions..... 5

Figure 2. Industrial Revolutions 6

Figure 3. Ebony Interactive Restaurant 13

Figure 4. Henn na Hotel Reception 14

Figure 5. Virtual, Augmented, and Mixed Reality Technologies 18

Figure 6. Key Digital Headlines 54

Figure 7. Growth Forecast for the Digital Detox Tourism Market 68

Figure 8. Changes in Global Internet Usage Over the Years..... 70

Figure 9. Primary Reasons for Internet Usage..... 71

Figure 10. Percentage of Internet Users in Urban and Rural Areas..... 73

List of Tables

Tablo 1. Classification of Open Tourism Data 58

Tablo 2. Indicators of Digital Engagement in Tourism 91

INTRODUCTION

Since the beginning of the 21st century, digital technologies have brought about profound transformations in social, economic, and cultural domains, reshaping classical modes of production and consumption. The tourism sector is among the fields most significantly affected by this transformation. Online reservation systems, mobile applications, virtual and augmented reality-based destination promotions, AI-powered personalized recommendations, and location-based services have integrated the tourist experience into an end-to-end digital network. Consequently, decision-making processes across a wide spectrum—from destination marketing to guest relations—have acquired a data-driven structure, and the sector has been radically reshaped not only in service delivery but also in the planning of tourism flows.

However, this digital transformation has introduced not only opportunities but also considerable risks and debates. The collection of personal data, the invisible guidance of algorithms, the susceptibility of online review systems to manipulation, surveillance capitalism, and algorithmic power highlight the ethical and political dimensions of digitalization in tourism. At this point, the phenomenon referred to as “digital dictatorship” points to a new form of power in which not only states but also global platforms and major technology corporations influence user behavior and even shape social norms.

This study addresses both the opportunities and threats brought about by digitalization in tourism through the lenses of surveillance capitalism and algorithmic power. First, the impacts of digital transformation and digital citizenship in the context of tourism are discussed; subsequently, the reflections of digital dictatorship on the sector are examined under subheadings such

as surveillance, data-driven guidance, algorithmic hierarchy, and automated decision-making systems. The main aim of the study is to demonstrate that digitalization in tourism is not merely a technological innovation but also a process that transforms economic and social power relations, while providing sectoral actors with an ethical, legal, and strategic framework.

1 DIGITALIZATION IN TOURISM

Digitalization is a process that begins with the conversion of analog data into digital format and, over time, evolves into what is known as digital transformation—fundamentally changing business operations, user experience, and service delivery. This transformation is supported by technologies such as artificial intelligence, big data, cloud computing, and the Internet of Things (IoT), progressing in parallel with globalization.

In the context of tourism, digital transformation reshapes all stages of the travel experience: from online reservation systems to digital guidance services, from virtual tour applications to personalized travel recommendations, many innovations have become possible through digital technologies. At the same time, destinations are promoted globally through digital platforms, while local businesses gain access to international markets.

Yet, this transformation also entails certain risks. Issues such as the collection of tourist data, the use of surveillance technologies, and digital inequality must be carefully examined in terms of tendencies toward digital dictatorship. Therefore, the process of digital transformation in tourism embodies a multidimensional structure that involves both opportunities and ethical responsibilities.

1.1 Digital Transformation and Globalization

The concepts of digitalization and digital transformation are among the key dynamics that today generate profound changes across economic, social, cultural, and political spheres. With the acceleration of technological developments, these concepts extend beyond the domain of information and communication technologies, transforming not only individuals' lifestyles but also organizational structures and even the governance approaches of states.

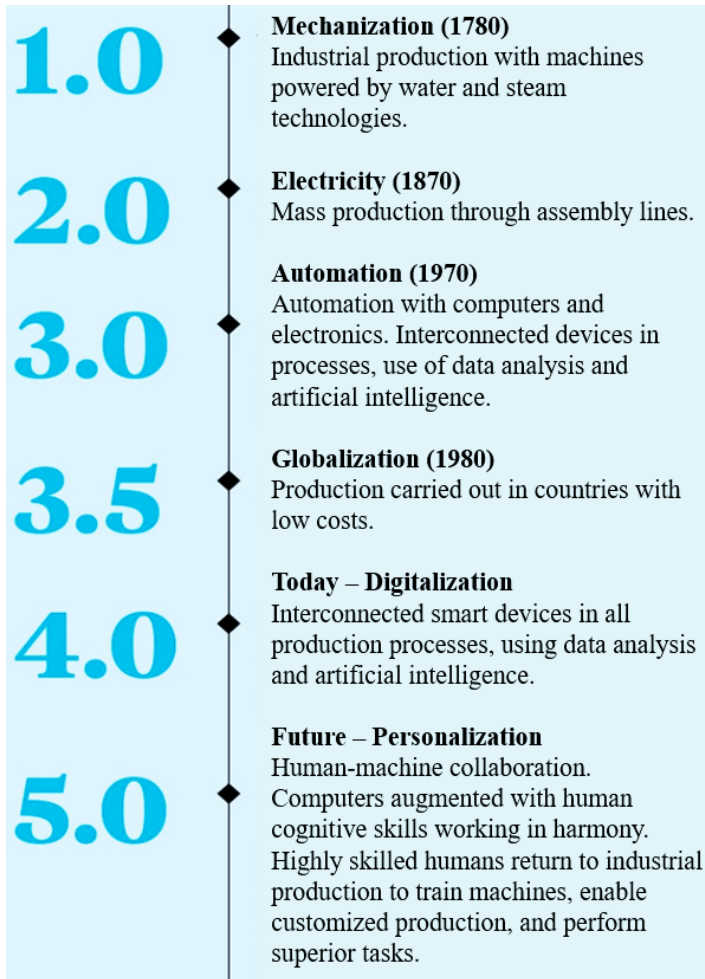
The term *digital* originates from the Latin word *digitus*, meaning “finger,” and in modern usage refers to the process of converting data into numerical form. In this context, digitalization means the conversion of analog (continuous) data into digital (discrete and numerical) form—that is, into a format that computers can understand and process. Through digitization, data have become easier to store, analyze, share, and manage (Klein, 2020a).

The first steps of digital transformation were taken with the development of computer technology and its integration into daily life. Initially, this process was limited to transferring analog information into digital environments within businesses and institutions. This enabled the automation of operational functions and their execution in a more efficient manner. For example, keeping accounting records in digital systems or managing customer relations through databases constituted the early stages of digital transformation.

However, over time, digital transformation has come to signify far more than simple digitalization. Today, digital transformation refers not only to the integration of technology but also to the emergence of new business models, the transformation of organizational culture, the shift of decision-making processes

toward data-driven structures, and the reshaping of social structures. This transformation is supported by advanced digital technologies such as artificial intelligence, the Internet of Things (IoT), big data analytics, blockchain technology, and cloud computing.

In this regard, Germany's *Industry 4.0* initiative and, more broadly, the concept of the *Digital Economy* are regarded as significant frameworks representing the current state of digital transformation (Omol, 2023). Industry 4.0 refers to going beyond automation in production processes toward machine-to-machine communication and decision-making carried out through digital systems, whereas the digital economy encompasses the conduct of economic activities in digital environments and the creation of value from these domains.

Figure 1. The History of Industrial Revolutions

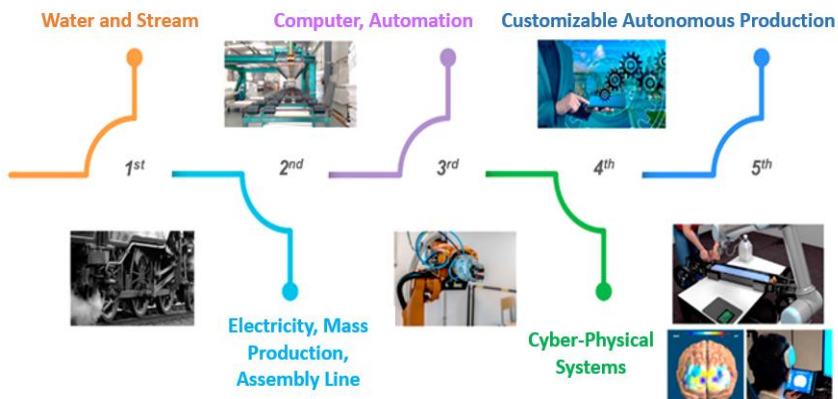
Sourca: URL-1

Germany, confronted with the competition of the United States' high-tech companies and China's low-cost labor, sought to maintain its economic superiority and therefore introduced the concept of *Industry 4.0* at the Hannover Fair in 2011. With this approach, Germany aimed to adopt digitally based production, bring its industry back within national borders, and achieve a competitive advantage by reducing labor costs. Japan, on the

other hand, developed the *Society 5.0* approach to address the challenges arising from an aging population, envisioning a sustainable “super-smart society” by integrating technology with human life.

Driven by necessity and the pursuit of convenience, the transition to steam power laid the groundwork for industrial revolutions (Okatan & Yıldırım, 2021). From the Industrial Revolution to the present day, innovations ranging from water- and steam-powered machinery to the use of electricity and ultimately digital production have transformed production systems (Gedik, 2021).

Figure 2. Industrial Revolutions



Source: URL-1

Digital transformation takes shape through the integration of individual and organizational information technologies, encompassing the transformative effects of modern technologies such as social media, mobile applications, data analytics, cloud systems, and the Internet of Things on businesses (Sağlam, 2020). Advances in information technologies, combined with the influence of globalization, have made digitalization significant for both national economies and all areas of daily life. On a micro scale, digitalization transforms people’s lifestyle habits and the

working methods of businesses, while on a macro scale, it influences public administration, organizational structures, economic dynamics, and business models. Due to global and national competitive conditions, businesses are compelled to integrate their existing structures, processes, and technologies into digital transformation. Since digital transformation can cause changes in all aspects of business—from processes to infrastructure, from product and service design to customer relations—it is important for the process to be carried out within a defined roadmap and strategic planning (Klein, 2020b; Boz & Serinkan, 2022).

Alongside sectors and businesses changing in terms of information and technology, it is observed that employees equipped to adapt to digital transformation also take part in the industry. Adaptation to digitalization requires transformations in employees such as technical competence, digital mastery, technology-oriented thinking, creativity, and problem-solving ability arising from digitalization (Kızanlık, 2022).

1.2 Digital Humanity/Citizenship

The concept of citizenship is considered a dynamic form of interaction among democracy, society, and education (Koç & Koç, 2021). A digital citizen is defined as an individual who possesses the knowledge and skills to effectively use digital technologies in order to participate in social life, interact with others, produce digital content, and share or consume such content. The distinction between digital citizenship and traditional citizenship lies in the former's emphasis on mastery of electronic processes between the state and citizens, as well as knowledge of digital environments (Yalçınkaya & Cibaroğlu, 2019). The behavioral norms that enable the conscious, correct, ethical, and responsible use of technology define digital

citizenship. It involves using technology efficiently and safely while also respecting the rights of others (Öztürk, 2021).

Ribble et al. (2004), who contributed to the development of the concept of digital citizenship, examined it across fundamental dimensions such as digital communication, access, ethics, commerce, literacy, health, law, rights-responsibilities, and security. Choi and Kim (2018) additionally addressed the dimension of digital participation (Tüfekçi & Çeliköz, 2024);

- **Digital Health:** Refers to the ability of digital citizens to maintain both their physical and psychological health, as well as to access health data anytime and anywhere through applications such as e-Nabız.
- **Digital Security:** Refers to the ability to protect personal data and digital tools while using the internet and digital technologies, and to take precautions against potential digital threats.
- **Digital Rights and Responsibilities:** Just as in real life, individuals have certain rights and responsibilities in digital environments. This competency involves being aware of one's rights and fulfilling one's responsibilities.
- **Digital Law:** Digital environments require rules for orderly and secure functioning. Digital platforms are not spaces for unlimited or irresponsible behavior. This competency entails knowing and adhering to these rules.
- **Digital Access:** Everyone has the right to access the digital world and utilize its opportunities. This competency refers to equal access to digital resources regardless of language, religion, race, sect, status, or position.

- **Digital Ethics:** In addition to legal regulations, moral values are valid in the digital world, and this competency involves adherence to these ethical standards.
- **Digital Communication:** Refers to expressing one's thoughts and emotions through written or verbal means on digital platforms.
- **Digital Literacy:** Encompasses the ability to access information, use it, critically evaluate it, and manage it effectively by taking advantage of the opportunities offered by the internet.
- **Digital Commerce:** Involves conducting shopping in digital environments, being prepared for potential issues, and performing online financial transactions.
- **Digital Participation:** Refers to active involvement in social life through digital environments.

Digital citizenship has directly shaped both the functioning of states and the lifestyles of individuals. Particularly during the COVID-19 pandemic, the use of digital technologies in accessing healthcare increased, accelerating the acquisition of digital identities among people (Öngören, 2022). While official procedures were previously carried out unidirectionally, they can now be executed bidirectionally in electronic environments. Conducting official and private transactions through digital channels has transformed information into a contributing factor in production processes. However, electronic environments involve complex processes that necessitate certain competencies for security purposes. Compliance with relevant regulations in official digital services is important. Conducting these transactions requires a device with internet connectivity and the ability to manage it effectively (Yalçinkaya & Cıbaroğlu, 2019).

One of these services, Beyaz Masa, is a call center established in 1994 by the Istanbul Metropolitan Municipality, aiming to

resolve public issues and provide consultancy by recording citizens' requests. With the activation of BİMER (Prime Ministry Communication Center) in 2016, citizens could access the Prime Ministry online 24/7 from anywhere in the world. CİMER (Presidency Communication Center) serves as a digital platform facilitating the exercise of information and petition rights, allowing citizens to submit opinions and suggestions regarding public policies (Dede, 2024a).

In addition to CİMER, established for digital communication, İHBARWEB (Information Technologies and Communication Authority Internet Information Reporting Center) was created to combat digital crimes, such as promoting suicide or encouraging gambling, under the scope of digital rights and responsibilities. Applications like KAYSİS (Electronic Public Information Management System), which can be evaluated under digital access, enable communication with public institutions, access to governance information, understanding organizational structures, and access to all documents related to services provided. In the dimension of digital commerce, e-Beyanname accelerates bureaucratic procedures by allowing electronic submission of tax declarations to the tax office. For digital literacy, e-Books provide readers with free access to book reading experiences. VERBİS, which can be considered under digital ethics, aims to facilitate rapid and easy submission of complaints regarding violations of personal rights. In digital law, UYAP (National Judiciary Informatics System) is a platform where judicial, administrative, and oversight activities are conducted, providing electronic integration for judiciary and support units. Under digital health, e-Nabız allows citizens to access and manage personal health information, schedule appointments, and view test results and diagnoses. The SİBERAY application, conducted by the General Directorate of Security's Cybercrime Department, guides users in safe internet use (Dede, 2024b).

1.3 The Impact of Digitalization on Tourism

Digitalization refers to the use of technological developments by businesses to transform existing business models, increase capacity for revenue and value generation, and gain a competitive advantage. The resulting changes and interactions are described as the digital transformation process. Digital transformations in the tourism sector allow tourists to pre-experience products and services, preventing potential issues, offering personalized services and products to ensure satisfaction, and enabling effective customer tracking through the processing of guest data (Asiltürk Okutan, 2024).

The COVID-19 pandemic accelerated the integration and effects of digitalization in the sector, reflecting on business models and customer demands, and leading to significant changes. With the increasing demand for digital services, tourists experience greater ease in accessing new destinations. Through digital marketing strategies and online platforms, both pre-travel information gathering and purchase processes have become faster and more accessible. Additionally, experience sharing and user reviews enable potential tourists to benefit more effectively from others' recommendations in their decision-making processes (Muğan Ertuğral et al., 2022; Sezgin et al., 2021).

The effects of digitalization are frequently observed in tourism components such as accommodation, travel services, tour guiding, and entertainment. Evaluating digitalization in the tourism sector requires a broad perspective because digitalization cannot be confined solely to tourism components. Even devices used by kitchen chefs can be considered as a reflection of the digital world in the sector. Therefore, all sub-activities and details of the sector's branches are directly or indirectly connected to digitalization (Kahraman et al., 2024).

Automation systems used in accommodation businesses to provide fast and high-quality service facilitate interdepartmental coordination and ensure that staff duties are carried out systematically and orderly. These automation systems are applied in various smart applications to enhance the guest experience. Biometric systems integrated with facial recognition technology and smart room keys simplify check-in and check-out processes, while AI-supported applications enable functions such as wake-up calls, automated curtain control, and voice-command temperature adjustment. Such smart room systems improve front-office operations and contribute to personalized service delivery (Zengin & Kazdal, 2020).

Software-supported digital menus display detailed information about food and beverage options on electronic screens, designed according to the business's field of activity and service type. Touchscreen or non-touch digital displays are commonly used in food and beverage establishments in the tourism sector (Karagöz, 2022). Digital dining tables enhance user experience by providing both digital menu presentation and real-time monitoring of meal preparation through chef cameras. These systems offer guests transparent information on meal preparation while creating an interactive experience. Moreover, these tables include internet access, meeting guests' online connectivity needs (URL-1).

Figure 3. Ebony Interactive Restaurant

Source: URL-2

The integration of artificial intelligence (AI) technologies into the delivery and management of tourism services has brought about profound changes. AI-based technologies such as machine learning, natural language processing, and data analytics are utilized to personalize guest experiences, enhance operational efficiency, and improve decision-making processes. Among these services, chatbots and virtual assistants provide uninterrupted 24/7 service, delivering instant responses and facilitating reservation processes. Data analyses help understand guest preferences and behaviors, enabling businesses to tailor their service offerings and marketing strategies (Skubis et al., 2024).

With the introduction of humanoid service robots in the sector, the impact of robotic technologies has become a determining factor in competition. Robots are increasingly used in various tourism departments, including food and beverage service, tour guiding, and front-desk operations, providing human-robot

interactive services instead of traditional human-to-human interactions (Sezgin & Karagöz, 2021).

Figure 4. Henn na Hotel Reception



Source: URL-3

Mobile applications provided by airlines allow passengers to manage their travel processes digitally. Through these applications, a wide range of transactions—such as flight reservations, ticket purchases, baggage tracking, check-in procedures, boarding with QR codes, access to support lines, and selection of special meals and seats—can be easily performed. This not only personalizes the passenger experience but also enhances operational efficiency (Çolakoğlu & Samancı, 2024).

Holograms, interactive design, NFC (Near Field Communication), audiovisual applications, as well as virtual, augmented, and mixed reality are increasingly used in museums today (Köken et al., 2025). Virtual reality provides tourists with unique interactive experiences, enabling them to acquire

information about a destination prior to visiting and reducing physical distance. Virtual museology, which transforms traditional museum practices, allows museums to reach visitors via websites and offer e-culture activities (Yıldız et al., 2022). Touchscreen kiosks have made museum experiences more interactive and engaging, and most visitors prefer to explore exhibitions through these kiosks. Personalized recommendations, videos, QR code scanning, and mobile applications in museums enrich the user experience, while the design and user-friendly interface of kiosks enhance efficiency (Vargün, 2022).

Today, online travel agencies have largely replaced traditional travel agencies. Through websites and mobile applications, services such as flight bookings, hotel reservations, car rentals, and holiday packages are offered, providing users with time-saving and 24/7 access (Doğan & Eker, 2022). Traditional booking procedures involve multiple intermediaries, such as travel agencies, banks, and payment providers, which increase costs and slow down the process. Blockchain technology, however, is transforming this structure by reducing intermediaries, making transactions faster, lower-cost, and automated. Smart contracts enable secure and efficient completion of reservation processes. Since all data is recorded immutably, the system ensures transparency. Passengers can track payments and avoid hidden fees. The decentralized nature of blockchain protects data without reliance on a single server, thereby reducing security risks such as identity theft and credit card fraud. Some airlines have adapted to this technological development and started selling tickets via cryptocurrency (Soydan & Rodoplu, 2024).

1.4 The Travel Experience Reimagined Through Technology

Systems incorporating advanced technological tools that allow individuals to experience digitally created environments are referred to as virtual reality (VR). Typically, these systems consist of a head-mounted display and a glove-like control unit called a Data Glove, which detects hand movements. This hardware allows users to perceive three-dimensional environments visually and auditorily in a realistic manner. VR operates through an intensely interactive user interface designed to create the sensation of being in an alternate reality, fully immersing the user in a digital universe (Baran & Baran, 2021).

The widespread use of mobile technologies and fast wireless connectivity has led to an increase in web-based and mobile applications, making it easier to create interactive, educational, and enjoyable experiences. Emerging technological innovations affecting the tourism sector have led to digital transformations. Innovative technologies such as robotics, the Metaverse, augmented reality (AR), virtual reality (VR), mixed reality (MR), and artificial intelligence (AI) are enabling reimagined travel experiences.

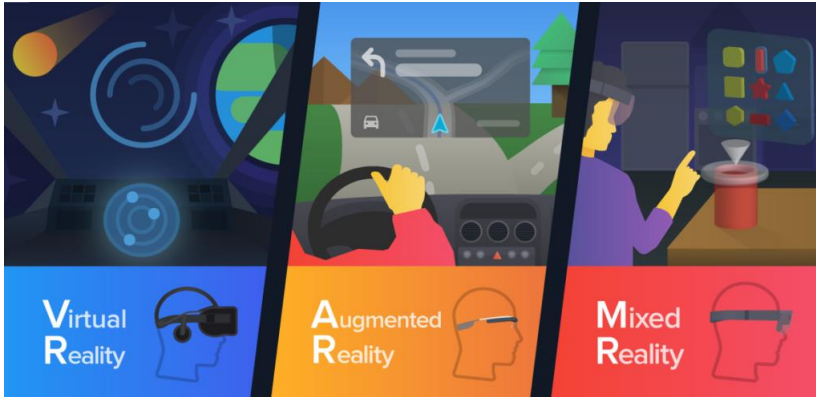
The use of augmented reality in marketing processes is gaining momentum and is considered a powerful tool capable of driving profound changes in marketing strategies (Ciğerci, 2025). AR is a visualization method that integrates digitally generated text, video, graphics, or GPS information onto real-world images (e.g., captured through computer or smartphone cameras). By projecting virtual data onto the physical environment, AR merges computer-generated visual content with the real world (Yılmaz & Karamustafa, 2022). AR technology, applicable in fields such as education, healthcare, art, commerce, and industry, is used in

tourism to enrich visitor experiences and support informative communication. It allows tourists to explore environments innovatively, preview destinations, evaluate services, and facilitate decision-making processes. Consequently, AR has become an important tool in marketing activities (Dağ & Çavuşoğlu, 2024).

Virtual tour applications enable users to explore destinations without physically visiting them, a process referred to as “Virtual Reality Travel” or “Virtual Travel Tourism” (Kuru & Akdoğan, 2022). VR headsets are employed for pre-travel planning in hotels, pre-sales services in travel agencies, and destination promotion. Through these tours, individuals can discover and obtain detailed information about services they intend to purchase. Unlike traditional brochure-based promotion, 360-degree VR videos provide a more interactive experience (Cığerci, 2025).

Virtual reality environments establish strong interactions between potential visitors and destinations, offering a competitive advantage in the tourism sector. Positive virtual tour experiences not only increase user satisfaction but also strengthen brand and destination loyalty. Satisfying VR experiences create a reciprocal interaction loop with real travel behaviors, providing valuable feedback for destination marketing strategies.

Additionally, the use of VR headsets has increased following the COVID-19 pandemic (Dinç & Bayrak, 2025). The primary distinction between AR and VR lies in user experience: in AR, users view the physical environment augmented with digital elements, whereas in VR, they are fully immersed in a digitally created artificial environment (Timur & Köz, 2022).

Figure 5. Virtual, Augmented, and Mixed Reality Technologies

Source: URL-4

Mixed reality (MR) technology, which enables users to interact with content, is particularly utilized in cultural tours by anchoring virtual content to specific points within physical spaces, thereby enhancing the user experience (Mkwizu, 2023). Combining virtual reality (VR) and augmented reality (AR) technologies, MR creates environments in which virtual and real elements interact, producing a realistic perception for the user. Although MR provides an immersive experience similar to VR, interaction with objects allows for a more natural and intuitive experience. By integrating virtual elements into an individual's physical environment, MR provides an opportunity to experience both worlds simultaneously (Mirza et al., 2022).

Extended reality (XR) encompasses all virtual and physical environments created through computer-assisted technologies. The "X" represents any current or future spatial computing technology. XR includes transitional phases between augmented reality, virtual reality, and mixed reality. The degree of virtualization may range from minimal sensory contribution to full immersion in a virtual environment. The primary aim of XR is to enhance human experience both through VR, which provides

a sense of presence, and AR, which facilitates information acquisition. The continuous evolution of human-computer interaction continues to drive the development of the XR concept (Creutzburg et al., 2021).

Artificial intelligence (AI) technologies are increasingly innovative tools and are also applied across various components of tourism. AI-supported systems can assist tourists throughout the travel process, from decision-making and booking to purchasing and service consumption during their trip (Asiltürk Okutan, 2024). This technology, which provides personalized and enriched recommendations, utilizes big data analytics to examine visitors' behaviors and preferences, supporting the development of more customized services. In particular, AI-based algorithms can analyze tourists' past travel experiences to suggest potential future preferences, making marketing strategies more effective. In this way, tourists are offered more suitable and engaging options, thereby enhancing the quality of their experience (İbiş, 2025).

2 DIGITAL DICTATORSHIP

Digital dictatorship is defined as the effort to control and direct a target audience using digital technologies. To achieve this goal, it employs both individually and collectively used technological tools.

2.1 Concept of Digital Dictatorship

Digital dictatorship refers to the continuous surveillance of society, the manipulation of individual behaviors, and the suppression of dissent through the use of digital tools such as big data, artificial intelligence, facial recognition systems, social media, and monitoring technologies. In the literature, the three

traditional elements of authoritarianism—legitimacy, coercion, and co-optation (control through participation)—can be implemented much more effectively and comprehensively through digital means (Schlumberger et al., 2024). Within this framework, digital technologies form the fundamental technical infrastructure of digital authoritarianism, offering unprecedented opportunities for data collection, manipulation, and behavior control.

Furthermore, Zuboff's concept of "surveillance capitalism" emphasizes the economic dimension of digital pressure, highlighting how private companies, rather than public authorities, predict and guide individuals' behaviors through data surpluses (Naughton, 2019). Additionally, governments—whether democratic or authoritarian—using AI for surveillance, censorship, and disinformation pose serious threats to individual freedoms and democratic institutions. For these technologically empowered authoritarian mechanisms to be effective, mastery of both technology and legal norms is critical (Helbing et al., 2018).

Digital dictatorship represents a new form of governance in which authoritarian regimes employ technology as a tool of control over society. These regimes combine traditional censorship methods with digital surveillance technologies, restricting citizens' access to information, limiting freedom of expression, and suppressing opposition (Morozov, 2011; Feldstein, 2021). In this sense, digital dictatorship is not only a political control mechanism but also a technology-based process of social engineering (Zuboff, 2019).

A defining feature of digital dictatorships is widespread surveillance systems. AI-supported facial recognition cameras, internet traffic monitoring, and big data analytics enable individuals and institutions to continuously observe and analyze

citizens' digital behaviors (Deibert, 2013; Qiang, 2019). This encourages self-censorship and restricts freedom even in public spaces. Social media posts, emails, and even private messages are subject to institutional oversight.

Another key feature is the shaping of public opinion through disinformation and algorithmic manipulation. In digital dictatorships, state-supported bot accounts, troll armies, and algorithms create false agendas while suppressing real information (Bradshaw & Howard, 2018). This legitimizes institutional narratives while systematically reducing the visibility of alternative perspectives, undermining democratic debate and preventing public dissent (Feldstein, 2021).

Digital dictatorships use technology not only as a surveillance and censorship tool but also as a mechanism to enforce compliance. For instance, applications such as social credit systems score individuals' behaviors to maintain social discipline (Zuboff, 2019; Qiang, 2019). Such systems influence not only professional life but also consumption habits, travel preferences, and social mobility. Therefore, digital dictatorship directly affects sectors that rely on mobility, such as tourism.

2.2 Surveillance Capitalism

Surveillance capitalism, as defined by Shoshana Zuboff, refers to the process by which digital platforms commodify user data and generate economic value from it (Zuboff, 2019). In this system, users' digital interactions are analyzed not only to provide services but also to predict and influence future behavior. Consequently, individuals unknowingly participate in the surveillance process, becoming a primary economic input.

According to Zuboff, this form of surveillance poses serious threats not only to individual privacy but also to democratic institutions (Zuboff, 2019). As a core dynamic of platform capitalism, this process does not operate solely based on user consent; it often involves exploitation legitimized through user agreements, without full awareness (van Dijck, 2014).

Surveillance capitalism represents a new regime of capitalist accumulation in which behavioral data derived from individuals' digital interactions are utilized for commercial gain and social engineering. Human experiences are transformed into measurable, trackable, and predictable data sets, which are then monetized. Surveillance capitalism undermines the principle of user consent, exploiting individual subjectivity, privacy, and behavioral predictability within a digital economy.

This concept is used to explain not only the practices of technological companies but also how cross-sector networks—such as security, advertising, tourism, and insurance—establish data-centric domains of power. In this context, the tourism sector has become one of the fastest-growing and most deeply penetrated areas of surveillance capitalism.

2.2.1 Commodification of Behavior

Within surveillance capitalism, everyday online searches, social media posts, location histories, and even user-generated content on review platforms are treated as “behavioral surplus” (Zuboff, 2019). These data are not only used to analyze past tendencies but also to predict and shape future preferences. For instance, a user's online research on a topic can trigger dynamic pricing, targeted advertisements, and personalized recommendations across different platforms via algorithms. This process channels personal freedom through economic and digital algorithms.

2.2.2 Data Architecture: Digital Hegemony

In recent years, digital platforms providing services across various sectors operate according to the logic of surveillance capitalism. These platforms analyze user behaviors through data-centric architectures, shaping both content delivery and user preferences. Recommendation algorithms, in particular, determine which products, services, or events are visible, thereby manipulating visibility (Gretzel et al., 2015). Such algorithmic manipulation has the potential to steer users toward economically profitable options rather than the most suitable services, creating an asymmetrical power relationship and reducing the competitive potential of small-scale actors with low digital visibility.

2.2.3 Surveillance Marketing and Emotional Perception Management

Surveillance capitalism targets not only rational consumer behavior but also users' emotional responses and psychological tendencies. Data derived from digital footprints are analyzed to infer variables such as stress levels, time pressure, and vacation motivation, forming perception management-based digital marketing strategies (Kang et al., 2014; Gretzel et al., 2016; Zuboff, 2019). For example, users' Google searches, Instagram activity, and social media interactions are analyzed to deliver content aligned with their emotional states. This shifts the experience from spontaneous to algorithmically guided.

2.2.4 Erosion of Privacy and Ethical Concerns

Surveillance capitalism practices raise serious ethical issues concerning privacy and data security. Location-based services—such as airport applications, city guides, and digital tour assistants—track users in real time and may share this data with third parties (Lyon, 2018).

Cookie policies and user agreements, often accepted without full awareness, provide a legal framework for this data flow, creating uncertainty and an asymmetrical relationship regarding data ownership. Within surveillance capitalism, the individual is not only a “service recipient” but also a continuously monitored and data-producing subject.

Surveillance capitalism is not merely an instrument for economic gain; it systematically transforms the nature of experiences, interferes with individual choices, and erodes privacy. The system aims to make the present predictable and steerable in order to “control the future.”

2.3 Algorithmic Power

Algorithmic power is a new form of authority that invisibly directs individuals’ access to information, behavior, and decision-making processes through digital infrastructures. This concept particularly applies to social media algorithms, search engines, recommendation systems, and AI-supported data analysis, functioning as a decentralized but highly effective control mechanism (Beer, 2009). These systems personalize content based on users’ past search and click behavior, providing “more relevant” options while simultaneously acting as a digital filtering and steering tool (Gillespie, 2014). Algorithmic power differs from classical authority in that it is guiding rather than coercive, consent-generating rather than repressive (Rouvroy & Berns, 2013).

2.3.1 Influence of Algorithms on Decisions

Algorithms are not only technical tools but also normative regulators. Decisions regarding visibility, content dissemination, and behavior encouragement are determined algorithmically,

creating “epistemic inequalities” in digital spaces (Villa et al., 2025). Algorithmic guidance shapes not only individual consumption behavior but also the visibility of products and services, directly affecting the digital competitiveness of relevant actors.

2.3.2 Visibility Economy and Digital Hierarchy

Algorithms utilize user behavior data to determine which products, services, institutions, or organizations gain prominence, establishing a “digital hierarchy.” Actors generating the most data and clicks gain visibility, while others are marginalized (Couldry & Mejias, 2019). Small, local, and alternative actors are disadvantaged, whereas branded products, services, and large enterprises gain prominence. Global platforms and those with high advertising budgets benefit digitally, reproducing economic inequality through algorithmic power.

2.3.3 Data-Driven Guidance and Standardization of Experience

Algorithms make recommendations based on prior behavior and the preferences of users with similar profiles, leading to standardized experiences—i.e., individuals with similar profiles encounter similar experiences (Gretzel et al., 2015). Original, spontaneous, or culturally distinct experiences are replaced by “pre-designed” and “optimized” algorithmic experiences. Popular businesses or viral locations on social media gain prominence in algorithmic rankings, while lesser-known cultural sites and alternative businesses are systematically excluded, narrowing diversity and cultural richness.

2.3.4 Political and Ethical Dimensions of Algorithmic Power

Algorithmic power is not only an economic issue but also a political and ethical one. Particularly in authoritarian regimes, digital platform algorithms function as tools for not only guiding users to products or services but also for information censorship, security monitoring, and behavioral control (Morozov, 2011). Digital traces can be used by state authorities for “risk scoring” in certain contexts.

Algorithmic processes are often opaque, and users make decisions without full awareness of these influences, blurring the line between data-driven guidance and free will. Therefore, algorithmic power must be considered both a technological and a critical, ethical, and political issue.

2.4 From George Orwell to Zuboff: Readings on Digital Power

George Orwell’s *1984* is a literary and political precursor to modern surveillance societies. In Orwell’s dystopia, individuals are constantly monitored through devices called “Telescreens,” and even thought is controlled by the “Thought Police” (Orwell, 2016; Karabulut, 2023).

While Orwell presents a state-centered model of totalitarian surveillance, Zuboff’s theory of surveillance capitalism argues that this system has evolved into a market-centered form managed by the private sector. Zuboff’s “Big Other” concept illustrates that surveillance operates algorithmically and economically rather than directly repressively, contrasting with Orwell’s “Big Brother” (Orwell, 2016).

Orwell’s critique centers the state, whereas Zuboff highlights that surveillance mechanisms are now in corporate hands, posing threats to democratic structures comparable to Orwellian systems.

Both perspectives, however, underscore structural transformations threatening individual autonomy in the digital age.

2.5 Rise of Digital Authority

Digital authority transcends traditional notions of power, functioning through new media technologies, AI systems, data architectures, and online platforms (van Dijck, 2014). This authority does not rely on a physical figure; rather, it presents itself as anonymous, technical, impartial, and rational. Yet this apparent neutrality exerts strong influence over individual choices, behaviors, and thought patterns (Gillespie, 2014).

Digital authority has increasingly replaced classical forms of authority since the second half of the 21st century. It emerges not only from state control or economic power of market actors but also from multi-layered sovereignty built through data ownership, algorithmic decision-making, control of information flows, and platform regulations. This new form of authority affects political, economic, cultural, and social practices.

With the proliferation of digital technologies, individuals and institutions are increasingly dependent on virtual spaces, data systems, and algorithmic guidance. Digital authority manifests in three dimensions:

2.5.1 Authority of Knowledge

Knowledge authority refers to the competence and recognition of an individual, institution, or source to produce or disseminate accurate, reliable, and valid information (Rieh, 2002). Decisions are largely shaped by platforms such as Google, TripAdvisor, Booking.com, which, despite appearing to reflect users' experiences, control information through algorithmic rankings,

sponsored content, and data-driven promotion. This plays a strategic role in shaping choices about what to purchase or which experiences to pursue.

The authority of knowledge is contestable, making it essential to ask: “Why is this source considered authoritative?” and “How reliable is the information source?”

2.5.2 Authority of Interpretation

Review systems, though appearing as tools to evaluate individual experiences, also act as digital authorities, establishing behavioral norms and disciplining service providers (Klostermann et al., 2025). Negative ratings can significantly weaken a business’s digital presence, giving platforms not only a record-keeping role but also digital influence over service providers (Bhuvaneswari, 2024).

Digitalization has accelerated information production and circulation, transforming interpretive authority. Traditional actors like experts, academics, or religious authorities are now supplemented or replaced by social media influencers, content creators, algorithms, and AI systems. Algorithmic structures determining visibility and accessibility indirectly influence which information or reviews are emphasized, constructing a new type of authority.

Interpretive authority in the digital age is thus a multi-layered power domain that shapes not only content creation but also how content is understood, continuously negotiated between individual freedom of thought and platform-based control.

2.5.3 Authority of Surveillance

Digitalization has fundamentally transformed the operation and scope of surveillance authority. Traditionally attributed to state apparatuses or central institutions, surveillance authority now functions in a multi-actor, distributed system. Private tech companies, social media platforms, and algorithms play active roles in surveillance, influencing user behavior, data sharing, access rights, and algorithmic rankings (Zuboff, 2019).

Michel Foucault's theories of surveillance and discipline provide a key framework for understanding digital surveillance authority. His panopticon metaphor can be reinterpreted through contemporary digital systems, where individuals are continuously monitored and data is collected, leading to self-regulation (Foucault, 2020). Surveillance authority thus operates not only externally but also as an internalized control mechanism.

Digital authority should therefore be seen not as a temporary technological phenomenon but as a new form of sovereignty emerging at the intersection of modern capitalism and digitalization. It regulates aspects such as experience production, visibility mechanisms, behavioral norms, and spatial access.

3 THE JOURNEY OF ALGORITHMS: FROM RECOMMENDATION TO GUIDANCE

With the rapid spread of digitalization, traditional word-of-mouth communication has gradually been replaced by electronic word-of-mouth communication. In the tourism sector, online content and reviews generated by users play a significant role in destination and service selection. The development of mobile technologies has led to an increase in applications used for travel planning and booking processes. However, the reliability of reviews on digital platforms and the risk of manipulation are

critical factors that users consider in their decision-making processes. In this context, leading platforms such as Tripadvisor, Booking.com, and Airbnb emerge as key actors shaping both user experiences and sectoral trustworthiness.

3.1 Mobile Applications (Airbnb, Booking, TripAdvisor, etc.)

Traditional word-of-mouth communication has increasingly been replaced by electronic word-of-mouth communication with the proliferation of digital communication. In electronic word-of-mouth, user-generated content is particularly important in the purchase of services, such as tourism, which cannot be directly tested. Tourists often consult online reviews before making decisions about destinations or accommodations, benefiting from the evaluations of those who have previously experienced them (Chu et al., 2022).

Advances in mobile technology, coupled with the widespread use of smartphones and tablets, have made electronic communication indispensable. Mobile applications emerge as tools that provide users with quick access to information through electronic communication. These applications, frequently used in the tourism sector, offer tourists information, route planning, and decision-making support before, during, and after travel (Altinpinar et al., 2024). They provide information about businesses and services, while user reviews help potential guests make informed purchasing decisions.

Reviews on digital platforms may contain factors such as business-originated manipulation, fake user comments, or selective participation. Reviews can be deleted, modified, or hidden by the business. Some reviewers may provide ratings without having experienced the service. The allowance of such

reviews depends on the platform. This raises questions about the reliability of platforms and influences which reviews potential guests consider. Generally, online review scores correspond with the official star ratings of hotels. Additionally, formal elements such as the device used to submit reviews and the presence of visual content may influence ratings, and a single negative experience can lower the overall score. Sensitivity to previous users' reviews and first impressions also plays a significant role in rating processes (Leoni & Boto-García, 2023).

Users commonly utilize applications for navigation, booking, travel planning, social media content sharing, and ticket purchases. Frequently used platforms include Google Maps, Booking.com, Instagram, and Obilet. These applications facilitate travel planning before and during trips, enabling easy reservations for accommodation and transportation. Google Maps is used for route creation and discovering nearby activities, Instagram for sharing travel experiences, and Obilet for booking bus and train tickets (Şimşek, 2024).

Tripadvisor, established in 2000, is a leading travel platform and a pioneer in electronic word-of-mouth communication. It quickly became one of the largest online travel platforms globally. However, in recent years, a decline in user numbers has been observed. The platform's reliability has been questioned due to the proliferation of competing platforms and fake or promotional reviews, which reduce user trust and create a negative image (Filieri et al., 2020).

Founded in 1996 as a small venture, Booking.com has grown into one of the leading digital travel platforms. Operating as an online travel agency 24/7, the platform offers over 28 million accommodation options in 43 languages. Post-stay reviews are collected via email links sent to guests who have experienced the

accommodation, ensuring that only verified guests can submit reviews (Akgöz et al., 2024). This approach aims to increase the platform's reliability by providing potential guests access to authentic, experience-based evaluations.

Airbnb is a widely used mobile application in the accommodation sector, enabling individuals to rent their living spaces to travelers for short periods. Launched in 2008, Airbnb had reached over 100 million users by summer 2016. The platform offers diverse and unique accommodation options worldwide, allowing users to make reservations online. Airbnb is described as a trust-based community marketplace, where accommodation can involve renting an entire property or a private room in the host's residence. The platform offers a wide range, from simple, affordable homes to luxury options (Guttentag & Smith, 2017).

Zomato and Foursquare are widely used mobile applications in the food and beverage sector. Zomato provides information about restaurants, menus, and user reviews, frequently used by travelers seeking local cuisine and quality gastronomic experiences. Foursquare helps users discover nearby restaurants, cafes, and similar establishments based on their location, allowing them to find the most suitable and popular venues according to user reviews and recommendations (Şimşek, 2024).

3.2 Location-Based Tracking (Digital Trace)

Tourist mobility, formed by decisions made and routes followed during travel, includes visiting tourist sites, discovering new places, and gaining cultural experiences. Tracking these behaviors helps understand tourist preferences and trends, contributing to destination planning, marketing, and infrastructure development. Today, large datasets are created and analyzed using sources such as big data analytics, mobile devices,

social media, and digital traces, enabling the analysis of tourist movement patterns and the application of insights to tourism services development (Chen et al., 2024).

Common digital tracking methods for analyzing tourist behavior include GPS devices, app-based GPS, mobile networks, social media platforms, WiFi, and tourism-related datasets. Social media content, mobile network records, and transactional data are particularly useful for studying visitor trends across large geographical areas. Location-tagged posts on platforms such as X, Instagram, Flickr, and Dianping help identify prominent tourist areas and potential destinations. Mobile networks assist in classifying tourist profiles and identifying movement patterns at destinations (Gao et al., 2024).

Smartphone users can access travel information during trips through applications such as smartphone-based guide services and location-based information tracking systems. These applications, which provide visual content, allow travelers to access relevant travel information at any time. The location-tracking capabilities of mobile devices also enable information filtering and personalization based on user needs (Azadaliyev & Demirkol, 2023). Tourist tracking techniques should be selected according to the application's cost and the type of data required. The main digital tourist tracking methods are explained as follows (Guerrero & Dias, 2024):

- **GPS Devices:** High-resolution GPS devices provided to tourists allow for highly accurate location data collection. This method is costly and logistically demanding, but it is frequently used in natural area management (Schmüzker & Reif, 2022).
- **App-Based GPS:** Applications installed on smartphones, when used in conjunction with the GPS sensors in the

devices, can automatically track tourists' movements. This method operates similarly to GPS devices. The collected data can be integrated with advanced technologies such as Geographic Information Systems (GIS). Disadvantages include the need for user consent, battery consumption, and reluctance to download the application (Guerrero & Dias, 2024).

- **Mobile Networks:** The passive data collection method monitors connections between phones and base stations. It allows long-term tracking over large areas. Limitations include low accuracy, the need for operator access, and ethical concerns (Guerrero & Dias, 2024).
- **Social Media:** Social media platforms enable communication and location-based content sharing. They serve as an important data source for understanding and analyzing people's behavior in specific locations. Posts containing geographic information and real-time sharing allow researchers to identify movement patterns, making social media an effective alternative source for tourism studies. While this method provides rich insights into emotions, perceptions, and preferences, its sample representativeness is low, and data are often biased or incomplete (Guerrero & Dias, 2024; Kovács et al., 2021).
- **WiFi:** This method records data and connection times of participants connected to free WiFi access points at destinations, allowing researchers to determine the places tourists visit and the duration of their stay. Personal data can be collected when connecting to the network, providing insights into visitor characteristics. Movement patterns can be inferred from route tracking and online search behaviors. WiFi tracking is commonly used to monitor crowd density at large events. It is low-cost but presents technical challenges such as privacy concerns

and signal strength fluctuations (Padron-Avila & Hernandez-Martín, 2020).

- ***Transaction Data in the Tourism Market:*** Digital transactions conducted through online reservations, search engine data, and electronic payments frequently used in daily life provide important indicators of tourist behavior. However, this method carries risks related to reliance on third parties and data privacy (Guerrero & Dias, 2024).

The greatest advantage of digital tracking techniques is that they provide high-resolution spatial and temporal data. For instance, GPS data can determine where a person is located and how long they stay at a specific place, with second-level time fluctuations. This information is crucial for understanding tourists' space utilization, preferred routes, and peak times. Temporal resolution is essential for analyzing trends such as seasonal changes or weekday-weekend differences, while spatial resolution allows visited locations to be visualized on detailed maps (Hardy & Shoval, 2025).

Geographic Information Systems (GIS) used in location-based data collection and visualization, when combined with Geographic Artificial Intelligence (GeoAI) technology, enhance spatial analysis capabilities and support data-driven decision-making processes. GeoAI processes multi-source data, including big data, satellite imagery, and social media content, enabling the monitoring of tourist flows, identification of crowded areas, and detection of high-risk zones. This, in turn, facilitates a more efficient and safer visitor experience. For example, location-tagged social media posts can be analyzed, mapped according to areas of interest, and used for resource planning. Personalized route recommendations and solutions can also be developed for users.

Convolutional Neural Network (CNN)-based algorithms that analyze image data can classify the safety levels of locations and integrate this information into user routes (Ülkü & Lobut, 2025). Location-tracking technologies are not only used to monitor tourist movements. Certain technologies also allow tourists to access spatial information, obtain information about sites, and track children or luggage.

Blockchain technology can be employed in the airline sector for baggage management processes. It allows passenger luggage to be tracked transparently during transfer. In cases of lost or misdirected baggage, the system records can identify at which stage and why the problem occurred. This technology enhances customer satisfaction and helps reduce operational errors for airlines (Şenerol, 2022).

RFID (Radio Frequency Identification) technology can be used for baggage tracking, providing information in museums and shopping areas, electronic passports, child tracking, and public transportation cards (Karagöz, 2022). Another technology, Beacon, facilitates passenger navigation in airport terminals and shopping areas. It provides information about product features, prices, discounts, and promotions. Additionally, it offers guidance to boarding gates and updates on flight schedules and terminal congestion. Its location-based capabilities enable personalized services and inform passengers about nearby opportunities (Meydan, 2023).

3.3 Automated Decision Systems and New Travel Preferences

With digitalization, everyday practices have transformed significantly, and automated decision systems (ADS) have increasingly played a decisive role in individuals' decision-

making processes. This transformation has directly impacted travel planning. Today, many individuals determine their routes based on algorithmic suggestions and make accommodation, transportation, and activity selections through digital platforms. AI-supported systems analyze numerous variables, including users' past preferences, geographic location, seasonal data, and budget constraints, to provide personalized travel recommendations (Koo et al., 2025). These developments have shifted traditional rational decision-making processes toward new travel experiences guided by algorithmic recommendations.

In this context, travel preferences are increasingly shaped by data-driven and predictive models. Especially in the post-pandemic period, factors such as health, hygiene, and avoidance of crowded areas have gained importance, leading ADS to prioritize recommendations based on these criteria (Li et al., 2022). However, this may narrow users' choices rather than broaden them, and invisible algorithmic biases risk homogenizing travel experiences. Therefore, while ADS facilitate travel decisions, they should be critically evaluated regarding individual autonomy, diversity, and the pursuit of unique experiences.

3.3.1 Neuromarketing

Today, marketing has evolved in parallel with significant changes in consumer decision-making processes. Traditional marketing approaches assume that individuals base purchasing decisions on conscious choices. However, neuromarketing research has shown that these processes largely operate through emotions. In this context, a model emerges in which consumers first feel, then act in their purchasing behavior, and later rationalize their choice (Bozkurt, 2024).

Neuroscience began to be applied in the 19th century when Italian psychologist Angelo Mosso, studying Ancient Egypt, examined blood pressure in the brain. From the 1970s onward, it found applications in marketing. For example, EEG (electroencephalography) devices have been used for about 40 years to measure viewers' responses to television content.

In 1995, Antonio Damasio, in his book *Descartes' Error*, highlighted the decisive role of emotions in decision-making processes. According to Damasio, Descartes' statement "I think, therefore I am," formulated approximately 300 years ago, was long associated with the notion of "I am rational, therefore I am," under which emotions were considered secondary and dependent on rational thought (Avcı & Meydan Uygur, 2022).

At the end of the 1990s, Geey Zaltman from Harvard University adapted functional Magnetic Resonance Imaging (fMRI) technology to marketing. Subsequently, in 2002, the term "neuromarketing" was introduced into the literature by Ale Smidts (Akın, 2014). This laid the foundation for the field of neuromarketing, which aims to leverage neuroscience in marketing research to gain a deeper understanding of consumer behavior. In this field, brain-based measurement techniques are used to transform collected data into marketing strategies (Karabacak, 2024).

Neuromarketing recognizes that the decision-making process does not rely solely on logic; individuals make choices based on immediate, emotional, and sensory responses. Approaches that aim to understand the influences behind these decisions are examined within neuromarketing (Cizrelioğulları et al., 2021).

Neuroscientific approaches include various methods and tools developed to measure, monitor, and visualize brain and nervous

system activity during individual behavior. The main technologies used in this field include functional Magnetic Resonance Imaging (fMRI), electroencephalography (EEG), magnetoencephalography (MEG), transcranial magnetic stimulation (TMS), positron emission tomography (PET), eye-tracking, galvanic skin response (GSR), heart rate (HR), electrocardiogram (ECG), facial expression coding (EMG), implicit association test (IAT), and functional near-infrared spectroscopy (fNIRS) (Akpur & Zengin, 2020).

Methods used in neuromarketing and neuro-tourism are divided into two main groups. The first group involves physiological responses of the body to marketing messages, while the second focuses directly on analyzing brain activity. Different signals are recorded in each method, and the collected data are interpreted using predictive analyses. Each method has its unique advantages and limitations. In the field of tourism, the most commonly used methods are listed below (Cizrelioğulları et al., 2021).

- ***Facial Expression Analysis (FEA)***: Emotional states can cause real-time changes in facial muscles, which can be detected using facial expression analysis systems. Technological systems are employed to assess emotional states such as fear, happiness, sadness, and surprise. These systems convert facial movements into numerical data to determine whether emotions are positive, negative, or neutral. For instance, gestures such as head turning or eye squinting are represented with specific numerical codes. High-resolution cameras record facial movements, which are then divided into small time intervals, and momentary expressions are analyzed and processed into numerical data (Özmen, 2022). Emotion analyses based on coded facial expressions are particularly important in tourism for evaluating customer satisfaction (Akpur et al., 2025).

- ***Eye Tracking Technology:*** This method determines where and for how long an individual looks and identifies focal points. It analyzes eye positions, movements, and pupil size at specific moments. Conducted using infrared sensors, it helps understand the cognitive processes underlying viewers' attention. Eye tracking provides diverse and objective data with high temporal resolution. Heatmaps and scans reveal the dynamic distribution of visual attention (Chen et al., 2024). Eye tracking allows marketing specialists to optimize resources, advertising strategies, and content by analyzing visual attention patterns, predicting consumer behavior, and facilitating personalized product development and effective campaign design (Calderón-Fajardo et al., 2024).
- ***Electrodermal Activity (EDA):*** Also referred to as galvanic skin conductance or psychogalvanic reflex (Özmen, 2022), this method measures changes in skin conductivity to assess autonomic nervous system arousal. These changes are generally related to sweating and have limited temporal sensitivity. Results may vary based on demographic characteristics such as age, gender, and ethnicity, as well as environmental factors like ambient temperature. Therefore, the body's internal balance (homeostasis) must be considered (Akpur, 2022).
- ***Functional Magnetic Resonance Imaging (fMRI):*** One of the most frequently used methods in neuromarketing, fMRI aims to understand how a person responds to stimuli. Participants are exposed to various visual or auditory stimuli, and brain activity is monitored in real time. The procedure identifies which brain regions respond at what intensity, generating an activity map that visualizes the functionality of the relevant regions (Coşkun & Yücel, 2017).

- ***Electroencephalography (EEG)***: This method monitors the brain's electrical activity in real time, recording rhythmic electrical signals that change in response to external stimuli (e.g., images or sounds). Participants are presented with different stimuli while electrodes capture brain waves. Data collected before, during, and after the process are analyzed and interpreted (Akpur & Zengin, 2022). Compared to other brain activity measurement tools, EEG is non-invasive, more affordable, and offers the highest temporal resolution among neuroimaging techniques, as it can measure electrical signals in sub-millisecond intervals. However, it has limited spatial resolution compared to fMRI, making it difficult to precisely localize the source of brain waves (Li, 2021).
- ***Magnetoencephalography (MEG)***: MEG measures the brain's magnetic activity non-invasively using a sensor placed around the head. It can detect responses to stimuli (such as messages or logos) with high temporal resolution and is superior to EEG in visualizing deep brain structures and minimizing magnetic field distortion. However, MEG is expensive, non-portable, and can only be used in laboratory settings. While it offers high spatial resolution, this is sometimes limited (Yücel, 2025).

In tourism research, multiple methods are often combined to determine how different brain regions relate to cognitive processes (Lei et al., 2022; Guerrero-Rodríguez, 2020; Hadinejad et al., 2019). Multi-method studies allow researchers to identify which brain regions respond and monitor temporal changes. This facilitates in-depth analyses and strategic interpretations for development purposes.

3.3.2 Algorithmic Advertising

The concept of an algorithm refers to the process of integrating various statistical methods to create analytical systems, which in turn develop recommendations, interfaces, and actions for users (Özaksoy, 2023). Algorithms aim to present the most relevant content to individuals by analyzing users' interests, preferences, and consumption behaviors. These systems not only personalize user experiences but also deepen data collection processes and expand digital surveillance networks. User interactions with content, clicks, and responses provide valuable data sources. These data can be utilized by major technology firms and various institutions for economic or political strategies (Demir & Dalaylı, 2025).

With digitalization, algorithms have generally been adopted by users as tools that simplify calculations, save time, and reduce effort. Users voluntarily contribute to the data these systems collect, motivated by receiving more accurate recommendations and the possibility of algorithms making decisions on their behalf. While some perceive this process, which begins with everyday decisions such as choosing which movie to watch, as a distortion, others interpret it as a natural evolution of technology (Özaksoy, 2023).

In tourism, algorithms are used in marketing strategies. For instance, Airbnb employs machine learning to optimize real-time pricing, considering building features, location, and surrounding amenities, enabling it to determine the best-priced property. During peak holiday and event periods, it anticipates potential vacancies and adjusts prices to maximize occupancy (Yılmaz, 2022). Recommendation algorithms play a key role in destination branding, allowing more personal and engaging interactions with potential tourists. By analyzing past searches, demographic characteristics, and interests, these systems suggest suitable destinations, attractions, and activities (Yaşarsoy, 2025).

Companies increasingly rely on artificial intelligence algorithms to inform functional decision-making based on the data collected. Interactions are personalized for consumers in digital environments. Beyond search and recommendation functions, algorithms are employed in social media AI and personalized digital advertising.

With technological advancements, advertisers can now deliver their messages at the most appropriate times. Digital traces, including users' online search history, social media interactions, shopping behaviors, and location data, can be analyzed by algorithms to create personalized digital profiles. These profiles enable advertisements to be targeted directly to the individual, a practice referred to as "micro-targeting" (Demir, 2025). This shift highlights the transition from traditional advertising to algorithmic personalized advertising. Such campaigns leverage not only online shopping data but also big data from physical retail behaviors. The collected data allows the recommendation of the most suitable products, increasing the likelihood of purchase. For example, after searching for a "black Teflon pan" on a search engine, users encounter related advertisements across digital platforms, which may influence their purchase decisions. Similarly, advertisements for restaurants or stores near a user's navigation-determined location may appear later in digital channels (Karaman, 2021).

3.3.3 Personalized Products and Services

Personalized and target-oriented strategies in Marketing 6.0 play a critical role in analyzing behaviors and trends using data analytics and artificial intelligence. Integrating advanced technologies into marketing processes aims to achieve a deeper understanding of customer experiences. Machine learning, blockchain, and smart data usage enable tailored solutions for

individuals. Technological advancements not only enhance customer satisfaction but also improve operational efficiency, foster innovation, and provide competitive advantages. Marketing 6.0 offers more advanced automation capabilities compared to its predecessors, 5.0 and 4.0. The integration of AI and machine learning makes activities such as data analysis, personalized messaging, and campaign management more efficient and automated (Özkuk, 2024).

Tourism is one of the sectors adopting Marketing 6.0 tools, providing both businesses and tourists with easy and effective means for vacation planning. The digital transformation of tourism has led to information abundance, which can complicate decision-making. During travel planning, users often struggle to choose among destinations, accommodations, activities, and transportation. Recommendation systems intervene by analyzing users' past data and preferences, providing personalized travel suggestions and making the decision-making process more manageable (Arslan & Gülenç Birsen, 2025). These systems primarily aim to organize information flow based on users' interests or direct attention to content relevant to a specific topic. They have been successfully applied to areas such as movies, books, scientific publications, travel and tourism services, and search queries (Çiçeklioğlu, 2024).

Currently, AI-based applications in tourism are reshaping travel marketing by enabling personalized vacation planning. Utilizing advanced technologies like natural language processing and deep learning, these applications can analyze tourists' expectations and needs, thereby improving service quality and customer satisfaction (Akpur, 2023). Paid advertising campaigns employing AI technologies in hotels can create engaging and effective content for guests. AI-generated titles and descriptions highlighting a hotel's features can increase click-through rates,

directly boosting bookings. Additionally, AI combined with data analytics can generate highly personalized email campaigns based on guests' past stays and preferences (Sü Eröz, 2025).

Studies on AI use in tourism indicate that chatbot interactions collect data applied to travel planning, accommodation selection, customer communication, personalized services, content creation, concierge services, menu planning, and data collection and analysis (Gürsoy, 2024; Cabi Bilge, 2023; Erul & Işın, 2023). AI-based chatbots in hotels analyze guests' past experiences to deliver services aligned with their interests and preferences. This personalization enhances guest satisfaction while providing marketing departments with insights for developing targeted products and services. Additionally, AI chatbots can offer recommendations on weather, local attractions, restaurants, events, and transportation, enriching the guest experience. They can also be used for in-room service personalization (Sü Eröz, 2025).

Online travel platforms like Expedia and Booking.com analyze user history to suggest travel packages and activities tailored to users' travel experiences and search behavior. Such personalization increases user engagement and strengthens customer loyalty for businesses. Expedia, in particular, supports users throughout the entire travel process, aiming for a holistic and personalized experience (Karapınar, 2024).

3.4 The Power of Social Media Platforms

There is no single universally accepted definition of social media in the literature. Its constantly evolving nature and changing user habits make the concept dynamic. Generally, however, social media refers to digital content created and shared through interpersonal interactions (Gedik, 2023; Sezgin & Karagöz,

2023). Alongside traditional media used for promotional activities, social media platforms have become widely adopted. Both public institutions and private sector organizations actively use social media to share up-to-date information with target audiences, monitor opinions, strengthen corporate image and reputation, and shape public perception (Duğan & Aydın, 2018).

Some key characteristics distinguish social media from traditional mass communication tools such as radio, television, newspapers, and magazines, which primarily provide one-way communication (Göker & Keskin, 2015):

- ***Participation Opportunities:*** Social media encourages individuals to create and share content while enabling interaction. Each person gains a feedback environment where they can express their own thoughts.
- ***Transparency and Feedback:*** Compared to traditional media, social media is more open to users and feedback. Interaction features such as commenting, voting, and content sharing support user involvement in the process. Access barriers are rarely encountered, and this freedom is particularly attractive for those seeking to distance themselves from societal pressures.
- ***Two-Way Communication:*** While content in traditional media is one-way, social media enables bidirectional communication. This structure allows users to be both content creators and consumers.
- ***Community Building:*** Social media facilitates easy gathering around shared interests, allowing content sharing based on common preferences, values, or hobbies.
- ***Networking:*** Social media tools enable individuals to create connections between content. Access to information is facilitated through likes, links to relevant websites, resources, or other social media profiles.

- ***Accessibility:*** Platforms are generally free or low-cost and are not restricted by private ownership or access limitations.
- ***Ease of Use:*** With a simple interface, users can easily participate in content creation. This is one of the main factors contributing to the widespread use of social media.
- ***Speed of Innovation:*** Compared to other media types, social media provides faster information flow, delivering current developments to large audiences quickly through instant sharing.
- ***Content Permanence and Flexibility:*** Content shared via social media can later be edited, updated, or deleted. This feature is often not possible in traditional media.

When examining consumer purchasing behavior in tourism, it is observed that information acquisition, evaluation of alternatives, purchasing, and post-purchase behaviors mostly occur through or are influenced by the internet and social media (Sü Eröz & Doğdubay, 2012). Social media, as a two-way communication platform offering significant opportunities, enables tourism businesses to reach wide audiences rapidly while providing tourists with a tool to share experiences, give feedback to businesses, and offer ideas for new opportunities. Tourism firms that effectively utilize social media are projected to achieve substantial long-term gains. By eliminating spatial and temporal constraints and facilitating reciprocal interaction, social media embodies a dynamic structure suited to the needs of the tourism sector.

For instance, hotel businesses attract attention through social media marketing strategies. By sharing information about campaigns and offers, they can communicate directly with customers. Businesses can analyze comments made on social media to improve service quality, strengthen brand loyalty, and

enhance customer retention (Kunt, 2024). Individuals, in planning vacations, benefit from social media platforms that feature tourism-related content; they follow official or private tourism organizations' accounts and engage with content related to destinations. This can contribute to more informed and well-planned holiday programs. While planning a completely safe holiday based solely on social media may not be feasible, decision-making can be supported by accessing content related to price-service comparisons, evaluating destination options, and reviewing information about tourism businesses (Erol & Hassan, 2014).

The increasing number of social media users has led to greater time spent on these platforms, making it imperative for businesses to strategically focus on social media. In this context, platforms such as X, Facebook, Instagram, YouTube, Tripadvisor, and Foursquare are widely used in tourism (Koçyiğit & Küçükcivil, 2022). Through social media platforms, businesses can implement strategies such as enhancing consumer relationships, increasing brand awareness, and fostering brand loyalty. Various competitions organized via social media can strengthen promotional activities. For example, followers may be offered rewards such as dinner at a restaurant, concert tickets, or free/discounted accommodation. From a destination management perspective, environmental awareness activities, social responsibility projects, and innovative applications are also shared with the public through these platforms. Metrics such as post views, clicks, shares, and comments are evaluated in relation to increases in visitor numbers, guiding medium- and long-term business strategies (Ünal & İpar, 2021).

Through effective social media platforms in tourism planning, individuals can easily perform various tasks related to their

accommodation. Some of these tasks include the following (Aktan & Koçyiğit, 2016):

- Through blog posts, information about facilities can be obtained, comments can be made, or experience-based content can be shared.
- On microblogging platforms such as X, businesses can be followed to access real-time information and establish direct communication.
- Before choosing a business, individuals can exchange opinions with acquaintances or their connections via social media networks to make informed decisions.
- On visual content platforms such as YouTube, shared photos and videos provide insights into a facility's amenities and offerings.
- On widely used social platforms such as Facebook, following business pages allows users to receive updates about campaigns and access advantageous opportunities.
- In the case of a negative experience, users can report it through social media to the facility management, relevant institutions, or the public to seek resolution or express a response.
- In the case of a positive experience, users can share it via social media to thank the business, offer recommendations to others, or post supportive content for the facility.

From the tourists' perspective, social media platforms are used as tools to psychologically interpret their tourism experiences and transfer these meanings to online environments. Individuals can produce and share content about their experiences regardless of time or location. Thus, the "instant sharing" feature enables the recording of travel experiences and simultaneous sharing with a

wide audience. In this way, individuals can participate in the sharing process through messaging, sending visual and auditory materials, posting comments on travel platforms, or publishing content on personal websites (Alguer & Çizel, 2021). Natural and genuine posts help sustain a positive image of destinations and can influence travel motivation by making abstract tourism products appear more tangible. For instance, following the earthquake in Japan on March 11, 2011, promotional policies faced the challenge of overcoming the image of a devastated and damaged country. To counter this, an application called “Post from Japan” encouraged visitors to share photos on popular social media platforms like Facebook by offering incentives such as free internet access based on the number of likes (Aşıroğlu & Çuhadar, 2021).

3.4.1 Vacation Perception on Social Media

With the global influence of social media, the tourism sector has transformed into a powerful tool that significantly affects tourists’ travel decisions and tourism businesses’ promotion and customer acquisition. These platforms, integrated with digitalization, directly influence tourism product marketing, destination promotion, and tourist participation in activities. The technological transformation of this new environment brings both opportunities and threats for tourism businesses and tourists (Dülgaroğlu, 2023). Individuals actively use social media before, during, and after their travel. Before traveling, they evaluate stories from those who have previously experienced the destination. During the experience, they make instant shares through mobile applications. After traveling, they share reviews, assessments, and feelings about the experience (Milano et al., 2011).

Considering that humans are social beings, social media platforms provide a strong interaction infrastructure. Actions such as sharing the location of a visited destination or posting a photo may stem from a desire to feel valued or to enhance social status (İmre, 2020). Individuals who enjoy showcasing themselves and the products or services they consume on various social media platforms often associate the symbolic meanings of their chosen products with their identities. Sharing for show has become common in areas such as clothing, entertainment, cosmetics, and travel (Biçer & Akgüre, 2022).

Consequently, social media has become a medium for sharing content intended to inform or influence others. The widespread use of smartphones and mobile internet has increased the frequency of experience-sharing. For example, in restaurants, people's initial reflex upon receiving food is often to photograph it rather than immediately eat, and these photos are frequently shared on social media platforms. Other users who view these visuals may be influenced by comments, prompting them to try the same restaurant, make recommendations, or remain indifferent. This process is shaped by individual perceptions of the visual content (Eryılmaz & Şengül, 2016). Consumers often interact in online communities with individuals whose thought patterns are similar to their own and give significant importance to reviews from those who have previously experienced the service. Thus, social media platforms have a substantial influence on destination and facility selection (Şahin et al., 2025).

3.4.2 TikTok and Instagram Tourism

On social media platforms, influencers with large followings and micro-influencers focusing on personal branding often specialize in lifestyle topics such as food, travel, or beauty. They produce content in these areas, share significant parts of their lives online,

and interact with followers to maintain their status (Pérez-Torres, 2024). Social media and prominent influencers on these platforms have become decisive for holiday choices, especially among the younger generation. Young individuals are influenced by what they see on social media, which increases travel frequency and enhances satisfaction from the trips taken (Olgaç & Yılmaz, 2020).

Instagram, where users can share memories and experiences, allows content to be viewed via user profiles and shared with specific people or publicly depending on privacy settings. These posts also appear in followers' main feeds. Photo and video posts can be supported with captions and hashtags, which facilitate categorization and accessibility. Anyone searching for a specific hashtag can access posts containing that tag. Geolocation information can be added to visuals, and other users can be tagged, enabling access to other content created in the same location. Since 2016, the "story" feature allows temporary posts that disappear after 24 hours (Eryılmaz & Yüçetürk, 2018).

Instagram is preferred over other social media platforms due to its extensive photo and video sharing capabilities. Given the stronger impact of visual content on people compared to text, Instagram plays a key role in tourists' destination choices, information acquisition, and experience sharing (Ünal, 2020). Tourism businesses actively use social media, especially Instagram, for promotion and marketing. For example, Marriott often shares luxury and comfort-themed visuals, Loews Hotels posts photos shared by guests, NH Hotels encourages guests to take photos from hotel room windows in the morning, and hotel chains like Hilton and Conrad accept direct reservations via Instagram (Ergun et al., 2019).

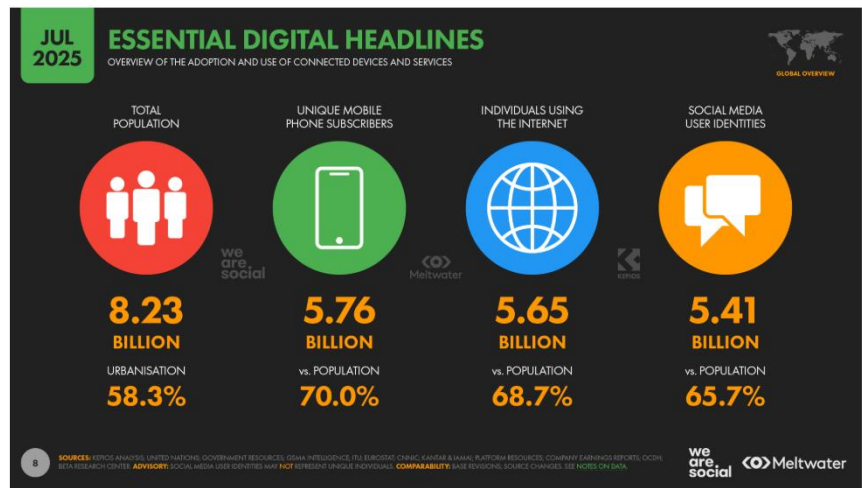
Event announcements for festivals, concerts, exhibitions, or openings by businesses and organizations are also disseminated via Instagram to reach wide audiences (Güngör & Çetin, 2021). Instagram Insights enables performance analysis by providing metrics such as post engagement, follower trends, and demographics, supporting data-driven marketing. In influencer marketing, collaborations with highly followed Instagram users allow brands to reach target audiences with unique content and increase brand awareness (Çiçek & Doğan, 2025). These activities can motivate individuals to plan their travels. Additionally, individuals may plan trips to interact with others or to showcase themselves. The observation of other lifestyles on platforms like Instagram, emulating them, and gradually placing oneself in their position—referred to as snobism—is increasingly common. Higher interaction levels indicate that tourists are more likely to view people living in different regions as role models and plan trips to experience their lifestyles (Gürkan & Ulema, 2020).

3.5 Digitalization: Invisible Hand or Invisible Cage?

A large portion of daily life is spent with digital devices and applications. People spend more time looking at screens than away from them. One important aspect of digitalization is the elimination of spatial constraints. The portability of digital technologies has made determining how to use time a crucial factor. As Sümer (2023) notes, “hundreds of millions of individuals suddenly began spending several hours every day and night, mostly immobile, in front of blinking, light-emitting objects.” The portability of these objects entails corresponding time requirements. Consequently, people use opportunities for entertainment, learning, and communication without being physically present in the same space. The wide-ranging possibilities offered by the digital world, especially flexibility in

time management, allow users to access content anytime and anywhere (Bindesen, 2025).

Figure 6. Key Digital Headlines



Source: URL-5

The United Nations’ World Population Prospects data indicate that the global population today is 8.23 billion, representing an increase of 70 million people (+0.9%) compared to the same period last year. As of July 2025, there are 5.76 billion mobile users worldwide, corresponding to 70% of the global population. Internet usage reaches 5.65 billion, representing 68.7% of the global population, while the number of social media users has reached 5.41 billion, accounting for 65.7% of the world population (URL-5). With the increase in time spent in digital environments, various negative consequences have also emerged. Technology addiction, weakening of face-to-face social relationships, and adverse effects on physical health and mental well-being may occur. Problems such as sedentary behavior, eye health issues, and sleep disturbances can be triggered. Spending more time in virtual spaces may reduce real-world interactions, increasing the tendency toward virtual friendships and online

sharing (Bindesen, 2025). Therefore, it is crucial to prevent digital technologies from becoming a “digital cage” in daily life. Conscious use of digital devices is important to enhance their positive effects. Awareness can be promoted through practices such as digital minimalism and digital detox.

3.5.1 Data Privacy

The protection of privacy in the collection of data is of critical importance (Başkaya & Karacan, 2022). While processing the collected data offers significant opportunities for individuals, institutions, and researchers, it also introduces new threats, risks, and areas of responsibility. Since this data may include personal information that allows individuals to be identified directly or indirectly, implementing measures to protect privacy is unavoidable. These measures not only safeguard individuals’ personal data but also consider the potential benefits that sharing the data may provide to relevant parties (Vural, 2018).

Concerns over privacy violations related to AI-enabled devices have increased, especially with the widespread adoption of personal assistants developed by companies such as Google and Apple for smartphones. Reports that such devices monitor users, record environmental sounds, and use data even in ordinary commercial advertisements reinforce negative perceptions, heighten privacy concerns, and emphasize the need for personal data protection (Eryılmaz, 2023). For instance, algorithms analyze various types of data and group similar data together, creating numerous categories and databases in digital environments. Over time, these data sets have also led to legal challenges. Although many international regulations aim to ensure data security, comprehensive and effective measures have not yet been fully implemented. Particularly, it was later revealed that Google and Facebook shared user data with different

companies. While Google's search engine function provides some transparency regarding data collection and sharing, Facebook's extensive data on users is notable. Facebook can elaborate users' psychological profiles through psychographic analyses (Durmuşahmet, 2021).

Algorithms do not merely monitor results or user behavior; they can also produce biases, replicate existing ethical issues, and distribute information unequally. Rather than transforming existing structures, these technologies tend to reinforce prevailing problems. Instead of contributing to the resolution of societal or ethical issues, they may reproduce and deepen them. Ethical concerns are thus central in discussions on algorithms (Kayıhan et al., 2021). The development of AI-based chatbots, which are also used in personalized recommendation systems, requires ethical principles and legal regulations to prevent misuse of user data. Their potential to produce malicious software constitutes a serious cybersecurity threat. This may harm tourism companies' reputations and jeopardize the confidentiality of sensitive data. The emergence of threats such as fake news generation and counterfeit brand identities may further increase in sophistication. Companies must pay close attention to security risks associated with personal data shared via technologies like ChatGPT (Karaca & Özkan Önem, 2023).

The tourism sector relies on direct customer information to meet clients' needs and expectations. Information and communication technologies facilitate access to such data and contribute to the development of personalized marketing strategies. Personal and demographic data collected from customers—such as addresses, emails, credit card numbers, age, occupation, and marital status—can be obtained by tourism businesses through various channels, analyzed, and stored in databases. These data may then be converted into actionable information for future marketing

strategies (Türeli et al., 2015). In this way, customer-focused services can be developed. However, cyberattacks, malware, and other digital threats can disrupt operational processes and negatively affect corporate reputation. Fraudsters may target customers during reservation and sales processes via fake websites or similar methods, causing financial losses. Such security vulnerabilities not only result in individual financial harm but also damage the reliability of the business. Hence, it is crucial for companies to manage customer data accurately, ethically, and securely (Yıldız, 2023).

3.5.2 Open Data Alternatives and Data Freedom

There has been an increasing demand for access to public data (considering restrictions such as personal data protection, security, and trade secrets) to monitor public activities transparently, participate in policy processes, and develop new value-added products and services. In response, the open data approach aims to remove legal and technical barriers to third-party access to public data, prompting public administrations to reassess policies, develop strategies, and implement practical applications. Open data is defined as “data that can be used, reused, and distributed freely by anyone, provided that attribution is given and any derived information, work, or service is also shared” (Altun et al., 2017).

Open data presents significant opportunities for technology companies, academics, and entrepreneurs across various sectors to develop products and offer new services to public and private authorities. Recognizing the potential added value from open data is essential. In particular, sharing data in standardized formats ensures that these effects reach a wider audience (Klopp et al., 2019). The benefits of open data platforms are summarized as follows (Kaya et al., 2020):

- Provides transparent information on infrastructure, demographic structure, workforce status, and resources, enabling investors to make informed decisions and contributing to the development of new business ideas.
- Businesses can use open data to enhance efficiency in their operational processes, improve performance, and support economic growth.
- Innovative firms utilizing open data can develop products and services using mobile applications, weather data, and location-based information, gaining a competitive advantage.
- The use of open data in areas such as logistics, employee health, and energy consumption reduces costs while increasing efficiency, thereby improving profitability.
- Open data-driven business opportunities create new employment prospects and contribute to improving individuals' quality of life.

Table 1. Classification of Open Tourism Data

Type of Open Data	Content	Usage Area
Geographic Data	GPS – Location information	Mobile applications and websites
Event Data	Event descriptions, timelines	
Visitor Statistics	Number of overnight stays	
Supply Statistics	Number of businesses, types of businesses, information about tourist sites	
Transit Data	Schedules	
Survey Data	Information about travel destinations, tourist attractions, restaurants, and events	Mobile applications, websites, academic and business research
Government Data	Tax distribution and collection	

Overall	Smart tourism cities, augmented reality applications, data services collected from various sources
---------	--

Source: (Pesonen & Lampi, 2016).

Among tourism data sources, user comments and shared past experiences on social media stand out. Due to their online and freely accessible nature, these contents influence tourists’ travel decision-making processes. Platforms such as TripAdvisor play a decisive role in individuals’ destination choices. Therefore, open data applications are important for research and practical purposes in tourism. Tourism businesses use open data platforms to conduct potential visitor analyses and to ensure the development of suitable products and services. The main objective here is to conduct strategic efforts according to certain criteria in order to utilize open data effectively in positioning tourist destinations (Kaya et al., 2020). Table 1 shows how some open tourism data are categorized based on their content. These data can be used to develop tourism policies and create sectoral strategies.

Data based on Bluetooth and WiFi signals have also begun to be used in tourism. Bluetooth technology, in particular, is used to track visitor movements in indoor areas where GPS or phone signals are weak. It is generally preferred in environments with high human traffic, such as large-scale events like festivals. WiFi data, on the other hand, is a more widespread and economical option compared to Bluetooth. Today, the widespread availability of WiFi access in destinations expands the scope of these data and increases accessibility (Kalvet et al., 2020).

3.5.2.1 General Data Protection Regulation (GDPR)

Personal data is a broad concept that encompasses any information related to an identified or identifiable natural person.

This includes not only directly identifying information such as a person's name, surname, place, and date of birth but also physical characteristics, family status, economic conditions, social relationships, and other individual attributes (Çelikel, 2021). Determining what constitutes personal data, as well as its storage and processing, requires protecting rights and regulating anonymity at both institutional and legal levels. Governments have established authorities and enacted laws to address these issues. In Turkey, the example is the Law on the Protection of Personal Data (No. 6698), while in the European Union, the regulation is the General Data Protection Regulation (GDPR). According to these laws, the criteria for personal data and anonymity are monitored between the data subjects and those who will collect, store, process, and share the data, with sanctions applied when necessary (Dilsiz, 2021).

The GDPR, which came into effect on May 25, 2018, was established to ensure the privacy and protection of personal data for individuals living in European Union member countries. The basic principles of data processing under this regulation are as follows (Savaş et al., 2020):

- The data processing procedure must be conducted in an open, transparent, and lawful framework.
- Data should be collected only for specific and legitimate purposes.
- The accuracy, quality, and auditability of the data must be ensured.
- The confidentiality and integrity of the data must be secured.

GDPR affects almost all tour operators and travel agencies. If a travel agency has a customer who is a U.S. citizen, the agency must comply with GDPR even if it does not operate within

European Union countries. Personal data of EU citizens must be securely protected in accordance with the standards set by this regulation. Hotels and intermediary online service providers must also securely store and protect the personal data of their customers. This data must be retained for at least one year. If it is to be used for purposes other than visitor registration, explicit consent is required (Chatzopoulou, 2021).

3.5.2.2 KVKK (Personal Data Protection Law)

With the enactment of the KVKK regulation on April 7, 2016, personal data is processed with a primary focus on protecting the fundamental rights and freedoms of the data subjects, and procedures to be followed in processing such data are established. The basic rules regarding data processing are as follows (Savaş et al., 2020):

- Operations must comply with Turkey's legal framework and adhere to the principles of honesty.
- Data must be verifiable and up-to-date when necessary.
- Processed data should be relevant to the specified purpose, limited in scope, and retained only as long as necessary.

The protection of personal data is a significant challenge for the tourism sector. Travel agencies, food and beverage services, and booking platforms process large amounts of personal data daily. Ensuring data security requires protecting not only digital systems but also analog data. These protections include secure passwords on computers, firewalls, and the safe storage of physical documents. Reception and reservation processes are particularly critical points in terms of data protection. Due to the high number of international visitors, it is recommended that data protection information be provided in English. In online

reservations, personal data processing agreements should be checked, and data must be transmitted through encrypted channels. Digital traces such as IP addresses and cookies also fall under personal data. Personal data are additionally collected through applications like video surveillance. Hotels monitor security cameras for staff safety and property protection and are required to display warning signs in these areas (Lučić, 2023).

4 DIGITAL INEQUALITIES AND ACCESS ISSUES

Digital inequality refers to the differences individuals experience in access to information and communication technologies (ICTs), their ability to use these technologies, and their purposes for usage. This concept encompasses not only access to the internet or digital devices but also digital literacy levels and the extent to which individuals can use these technologies effectively (Dijk, 2021; Warschauer, 2003). Social, economic, and geographical factors are key determinants of digital inequality. Individuals living in rural areas, those with low incomes, and the elderly are particularly affected (Helsper, 2012).

Digital access issues make it difficult for individuals to equally reach fundamental areas such as education, healthcare, public services, and employment, increasing the risk of digital exclusion (OECD, 2019). During the COVID-19 pandemic, the widespread use of online services highlighted the social impacts of the digital divide. Therefore, achieving digital inclusivity requires not only strengthening technological infrastructure but also developing digital skills and implementing comprehensive social policies targeting disadvantaged groups.

4.1 Digital Minimalism

The rapid integration of digital technologies into daily life has made them indispensable. They provide significant innovations and conveniences in many areas, from education and entertainment to communication and business. However, alongside their benefits, uncontrolled and unmindful use can result in negative outcomes affecting academic performance, social relationships, and physical health (Erkan et al., 2024).

The most notable negative consequence, digital addiction, can be examined through subcategories such as computer addiction, internet addiction, digital game addiction, social media addiction, and chat addiction. These types of addiction are fundamentally based on the loss of control while using digital devices (Biricik, 2022). Individuals whose interaction with technology is near excessive, whose attention is almost entirely directed toward this interaction, and whose well-being is adversely affected are defined as “digitally addicted.” Digital addiction, which highlights the potential warning signs of excessive exposure to technological devices, becomes especially evident as daily usage surges and dependency on these devices reaches critical levels (Rugai & Hamilton-Ekeke, 2016).

Psychological problems associated with excessive smartphone and internet use include nomophobia (fear of being without a phone), FoMO (fear of missing out), and netless phobia (fear of being without internet), particularly prevalent among young people. These issues are linked to depression, anxiety, and other negative states (Uluçay & Kobak, 2020). Digital addiction limits physical mobility, reinforces a sedentary lifestyle, and, combined with altered eating habits, may lead to obesity, musculoskeletal disorders from prolonged device use, and other health problems (Kuşcu & Göde, 2024). It can also trigger dishonest behaviors,

create family tensions, and lead to social communication problems (Yıldırım, 2021). Generally, digital technologies are overused to alleviate boredom or a lack of stimulating effects. Given its insidious progression, the increasing integration of technology in daily life, and the limited and often ineffective long-term interventions, digital addiction is considered highly dangerous (Baciu, 2020).

One of the emerging strategies to combat digital addiction is digital minimalism. Digital minimalism is an approach that encourages individuals to use technology only for specific purposes and with deliberate choices (Sargin, 2025). It has become particularly important for individuals seeking a healthier and more balanced lifestyle, allowing them to distance themselves from constant distractions and focus on what truly matters. By using digital devices more consciously and purposefully, this approach supports productivity, mental health, and strong social relationships. Individuals are encouraged to prioritize activities that provide value and satisfaction over excessive screen time. In a society where technology is constantly accessible, digital minimalism helps individuals regain control over their attention and time, leading to a more meaningful and fulfilling life (Sandua, 2024). The three main types of digital minimalism are as follows (Skivko et al., 2020):

- **Digital Diet:** Temporarily disconnecting from digital devices in daily life, work, or educational activities. It is widely preferred in both personal and professional contexts due to its ease of implementation and rapid effect.
- **Digital Detox:** Similar to a physical detox, this process involves a longer, planned period. Media consumption is limited, and the goal is to consciously manage digital

device usage, reduce stress from work and personal life, and strengthen mental and physical well-being.

- **Media Asceticism:** The most comprehensive form of digital minimalism, in which the individual fully withdraws from digital life and culture. This approach requires strong willpower and determination and demands long-term commitment. It imposes certain restrictions on digital communication.

The tourism sector has also been influenced by the digital minimalism approach. Tourists' desire to spend their holidays either temporarily or completely disconnected from digital devices has been reflected in their tourism expectations. Consequently, new tourism concepts such as "digital detox tourism," "disconnected tourism," or "unplugged tourism" have begun to appear in the relevant literature (Karagöz, 2022).

4.2 Analog Travel Movement

As a result of the demand for travel experiences that are partially or completely free from digital devices, new trends have emerged in tourism. Travel types in which digital devices are deliberately limited are referred to as digital detox tourism. Although considered a relatively new concept, the desire to escape from the chaos of daily life has been recognized as an important need since the 1970s (Aydınli & Akgöz, 2024).

Tourists who aim to regain control over technology by disconnecting from the digital world during their vacation adopt strategies such as disengaging from online monitoring and engaging in introspective reflections. Participating in structured, digitally-free tourism activities allows tourists to interact offline. Digital detox practices and applied mindfulness enhance personal development through innovation, being present in the moment,

and social interactions free of distractions. This process helps reestablish the boundary between everyday digital life and travel experiences, which are often dominated by constant technological connection (Hassan & Saleh, 2024).

Tourism activities that focus on spending time in nature and in technology-free environments aim to reduce dependence on social media, smartphones, and other technological devices. The intensive daily use of digital devices in modern life has made digitally-free travel increasingly significant and a special area of interest. This form of tourism has become a preferred choice for tourists seeking to restore both physical and mental well-being by disconnecting from digital technologies. The main characteristics of this type of tourism are as follows (Boyacı Yıldırım, 2024):

- Participants spend time in areas with no internet or phone signal, providing them with a nature-immersed experience free from digital connections. Many hotels, resorts, and nature camps are located in zones where internet access is limited or completely unavailable to support digital detox services.
- Various activities such as meditation, yoga, nature walks, and therapy sessions are offered as part of digital detox programs. These activities support participants' mental and physical well-being during periods away from digital devices.
- Participants are encouraged to interact and communicate face-to-face without relying on technology. This enables them to develop social relationships with others who have gathered for similar purposes.

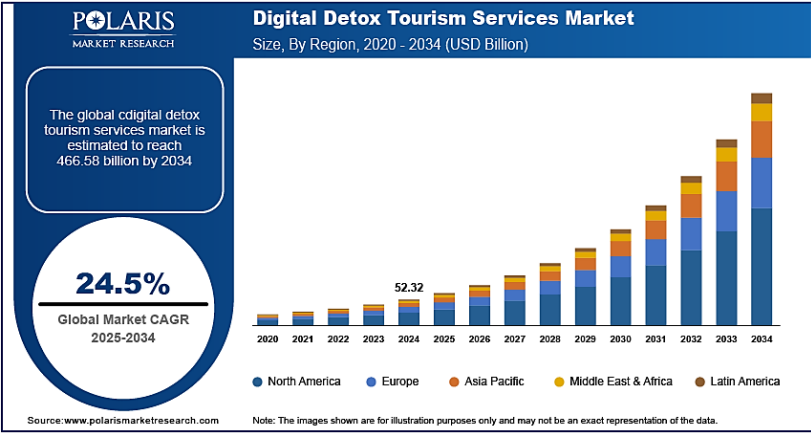
Within this context, new packages and services have begun to be offered in accommodation and travel services. For example, travel agencies aim to provide individuals with the digital-free

vacation they desire through digital detox holiday packages. These vacation packages can be categorized into three types (Hoving, 2017):

- ***Soft detox holiday packages:*** Technological facilities, such as televisions and other digital devices, are available at the destination and accommodation. In this package, the responsibility for using digital devices lies with the individual's own discretion.
- ***High detox holiday packages:*** Digital devices are not available at the destination. However, there is a shared digital access area nearby where digital connectivity is possible.
- ***Full detox holiday packages:*** These are destinations and facilities where no information and communication technologies are available. In this package, participants are completely free from digital devices.

Campers, backpackers, and families with young children tend to disconnect from digital technologies more than other tourists. The motivations influencing the choice of these vacations include the need to establish social bonds, the pursuit of spiritual fulfillment, concerns about information security, and the desire to avoid international mobile/internet fees. Additionally, the desire to unplug from technology is driven by factors such as enhancing psychological well-being, achieving mental relaxation, escaping work-related pressures, and spending more quality time with family members (Topsakal & Dinç, 2022).

Figure 7. Growth Forecast for the Digital Detox Tourism Market



Source: URL-7

Digital detox vacations cater to the growing demand for experiences that prioritize mental well-being, mindfulness, and face-to-face social interaction. It is anticipated that the demand for digital detox tourism will increase among individuals seeking to relieve stress and burnout caused by technology dependence. This will lead to a surge in the demand for digital detox tourism services. Polaris Market Research predicts that this market will grow at an average annual rate of 24.5% during the 2025–2034 period (URL-7).

4.3 Global Inequalities in Technology Access

The digital divide, also referred to as the “digital gap” or “digital inequality,” was first defined in a 1999 report published by the United States National Telecommunications and Information Administration (NTIA) to describe the disparity between individuals who have access to new technologies and those who do not. The concept explains differences in access to and use of information and communication technologies across individuals,

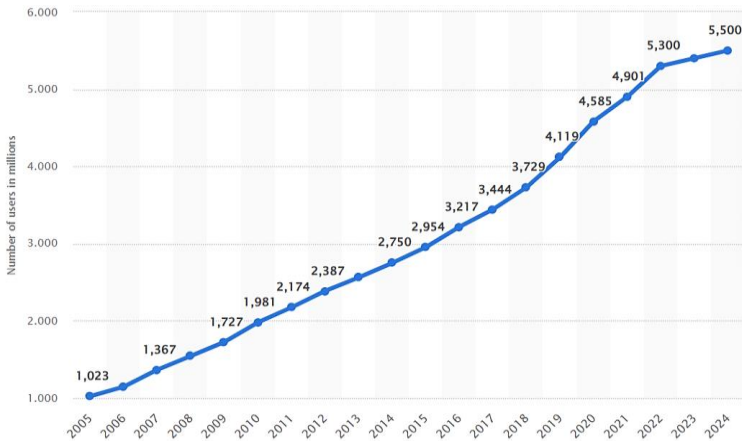
households, businesses, and regions with varying socio-economic statuses (Çevik & Toplu, 2023). The issue of digital divide can be classified into three main stages (Bolat, 2024):

- ***Economic Inequality:*** The most fundamental form of digital inequality, economic inequality refers to the lack of necessary hardware (such as internet connection, computers, etc.) required to use information and communication technologies (e.g., e-government services). In this type of inequality, a clear gap emerges between individuals with sufficient economic resources and those who lack access to these facilities.
- ***Usage (Capability) Inequality:*** This inequality refers to the inability of individuals to effectively use technological tools even when they have access to them. It can be mitigated by acquiring skills such as computer and internet literacy. Overcoming economic inequality is important, but being able to use these tools effectively is equally critical. However, acquiring this capability may be more challenging than gaining economic access.
- ***Participation Inequality:*** This refers to the inability to actively participate in the production and development processes of information technologies. While usage inequality can be gradually reduced once a certain level is reached, participation inequality is a more persistent issue. Most users of network technologies and information systems engage with them only at a consumer level rather than as producers or developers. This limited engagement also has implications in the context of social networks and communities.

Other factors influencing digital inequality or the digital divide include institutional structure and type of government, social and economic status, cost, speed, quality of content and services,

infrastructure conditions, knowledge and skills, psychological factors, and culture. Among these, the most decisive factor is social and economic status. Socioeconomically developed societies hold a stronger position in generating, processing, and disseminating information. Countries with higher economic levels have advantages in creating infrastructure for information and communication technologies, strengthening institutional structures, and integrating these tools into future technical service processes (Çevik & Toplu, 2023). Although access to digital technologies is seen as a basic requirement, it is not equally distributed within societies. The mere presence of devices such as computers, internet connections, or smart TVs at home is insufficient. When individuals lack the necessary knowledge to use these tools effectively, access becomes functionally meaningless. Evaluated solely from the perspective of possession or non-possession, it may appear that the requirements of the digital age are being met. However, this approach can obscure the visibility of new types of inequalities in the information society (Görgün Baran & Erdem, 2017).

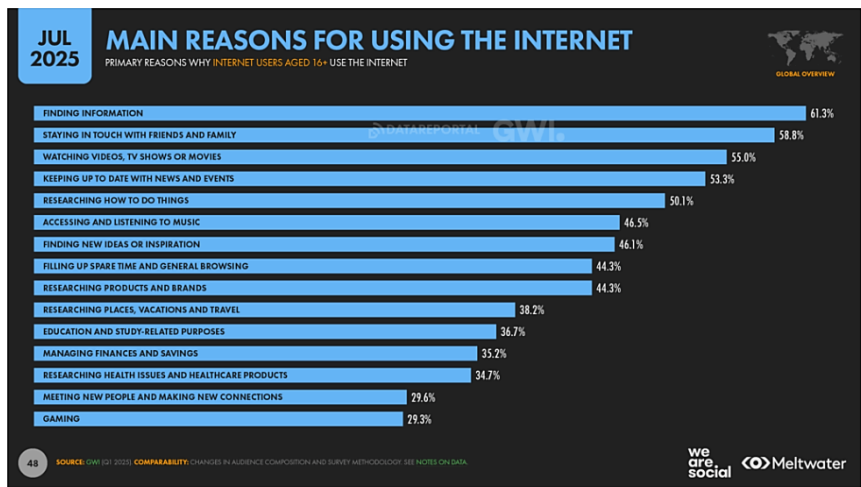
Figure 8. Changes in Global Internet Usage Over the Years



Source: URL-8

The number of internet users worldwide has reached 5.5 billion. While approximately 90% of the population in developed countries has access to the internet, this rate is below 70% in developing countries (Arslantaş, 2025). According to the Household Information Technology Usage Survey conducted by the Turkish Statistical Institute, the internet usage rate among individuals aged 16–74 was 87.1% in 2023 and 88.8% in 2024. In terms of gender, internet usage in 2024 was 92.2% for men and 85.4% for women (URL-6). When examining the reasons for internet use, information seeking (61.3%) and maintaining contact with friends/family (58.8%) were identified as the primary reasons. However, there are still destinations without internet access today.

Figure 9. Primary Reasons for Internet Usage



Source: URL-5

Elderly individuals can use digital tools to strengthen their social relationships and support their quality of life. However, lack of knowledge, negative attitudes, and age-related physical limitations make the efficient use of these technologies challenging. Current smartphone models are not fully compatible

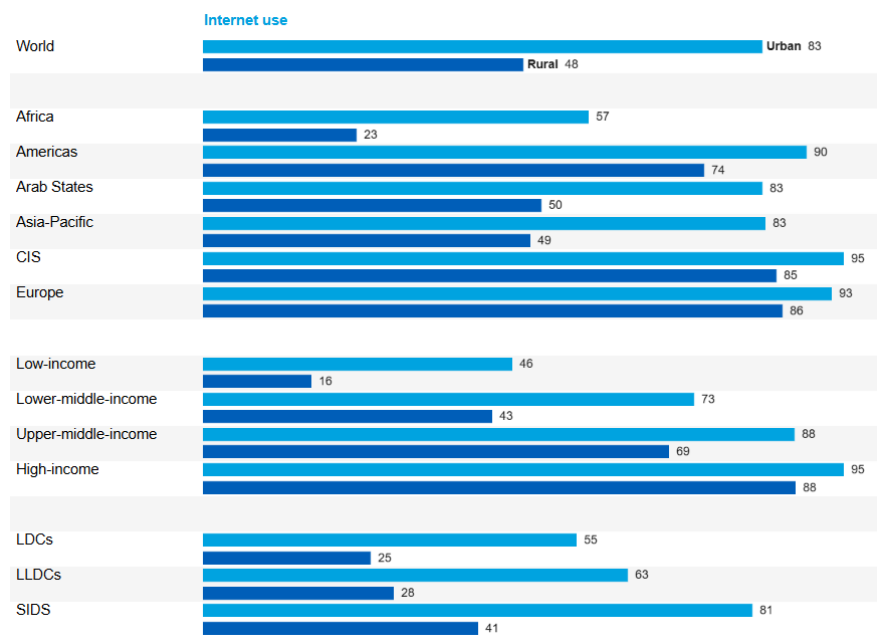
with the habits and needs of older adults, and insufficient knowledge about cybersecurity makes digital threats a concerning issue. This situation necessitates considering the needs and ease of use for older adults in the technology design process. Comprehensive training programs on effective technology use and cybersecurity awareness can be effective in overcoming these barriers (Koçak & Keskin, 2024).

Examining destinations without internet access, it is observed that in Burundi, East Africa, 87.8% of the population lacks internet access. In the Central African Republic, 87.5% of the population is offline. In North Korea, internet access is restricted for the vast majority of citizens. The top five countries with the highest number of internet users globally are China (1.1 billion), India (881.3 million), the United States (311.3 million), Indonesia (215.6 million), and Pakistan (170 million) (URL-9).

4.4 Destinations in the Shadow: Invisible Geographies

Digital inequality refers to the disparities in access to technological tools as well as resources such as software, education, and content. Social and geographic conditions affect individuals' ability to access technology. For example, people living in urban centers and rural areas do not have the same opportunities for internet access. The central perspective of this factor, which is linked to social inequalities, is that the lack of access leads to negative consequences despite the benefits of internet connectivity. When examining the differences between developed and developing countries, disparities in internet usage rates are notable. This gap contributes to social and global divergences in economic conditions, access to information, and overall welfare. Moreover, the level of ability to effectively use these technologies also influences inequality (Kalaycı, 2023).

Figure 10. Percentage of Internet Users in Urban and Rural Areas



Source: URL-10.

By 2024, 83% of the global population living in urban areas use the internet, whereas this rate is 48% in rural areas. Of the 2.6 billion people who do not use the internet, 1.8 billion live in rural areas and 800 million live in urban areas. The disparity between urban and rural areas varies significantly across countries with different income levels. In high-income countries, this gap is almost negligible (1.1%), whereas in low-income countries, only one in six people (16%) uses the internet. This rate is approximately one-third of the rate in urban areas (URL-10).

Although technological advancements and new inventions are expected to eliminate inequalities between regions, societies, or states, technological developments have actually shifted these disparities to a different dimension. People may migrate because they cannot fully benefit from digital advancements in their

current location, and often face digital inequalities even in the places they move to. The digital divide especially drives migration in the fields of health and education. Individuals seeking to specialize in healthcare in countries with less advanced technology may migrate to environments with better technological facilities for education and employment. Such migrations can also occur within the same country, between regions or provinces (Tayanç, 2021). Social exclusion resulting from insufficient access to information and digital technologies, negatively affecting personal, political, and economic capacities, is defined as digital exclusion. Ensuring equal access to the internet and promoting effective use through digital literacy training when necessary is crucial. For instance, to address the digital divide, the Internet for All Now Act was introduced in California in 2017. This legislation aimed to provide the necessary infrastructure for internet access to individuals in low-income and rural areas and to support digital literacy education (Sanders & Scanlon, 2021).

4.5 Language, Culture, and Code Barriers

The gap between those who have meaningful representation in the internet and global digital environment and those who do not is referred to as the digital language divide. The connection between language, culture, and society is grounded in individuals' and communities' ability to express themselves in their own languages, which underpins personal identity, ideas, and worldview, and supports the preservation of a unique perspective. Current AI-based language technologies-such as language models, machine translation systems, multilingual dictionaries, and texts-primarily focus on languages spoken by only 2-3% of the world's population (Bella et al., 2023).

Language is one of the most fundamental elements shaping a society's cultural identity. However, globalization and the dominance of major languages are pushing approximately 3,000 languages toward extinction. Today's AI-based translation systems often fail to fully reflect cultural uniqueness, experiential narratives, and historical contexts, prioritizing speed and efficiency instead. This situation leads to the neglect and marginalization of linguistic diversity (Anik et al., 2025). For example, in mobile app design, factors such as usability, layout, color, text, and accessibility must be considered. For designs targeting multiple cultures, these factors must also be evaluated culturally. In multicultural applications, the specific cultures of the users must be analyzed, and after understanding all standards, the application should be designed to accommodate cultural diversity (Ross & Gao, 2015).

The most widely used language in computer and internet environments is English. Since internet access is a primary indicator of the digital divide, the language factor is crucial. People who do not know English have limited access to the digital world and are often compelled to learn English. This situation is further complicated because most software and hardware are designed in English. New technologies must go through a challenging translation process before becoming usable for non-English speakers. This process delays the dissemination of technology and can create new issues. Most technology-related terms are of English origin and do not have equivalents in less widely spoken languages. Even in languages like Turkish, English terms such as “format” and “update” are used. Consequently, understanding user manuals and software instructions becomes difficult, widening the digital divide for individuals with low education levels and those who are disadvantaged (Yaman, 2015).

5 A DIGITAL PERSPECTIVE ON THE FUTURE OF TOURISM

Digitalization is driving profound transformations in the tourism sector, reshaping both service delivery methods and tourists' travel experiences. Technologies such as artificial intelligence, big data, virtual/augmented reality, and blockchain are transforming how tourism businesses interact with customers, manage operations, and develop marketing strategies. In particular, online booking platforms, mobile applications, and personalized digital services allow tourists to plan their trips more flexibly, quickly, and conveniently (Buhalis & Amaranggana, 2015).

The tourism of the future is evolving into a hybrid structure enriched not only by physical spaces but also by digital experiences. For example, virtual tourism applications provide alternative experiences for individuals unable to physically reach destinations, while augmented reality technology makes on-site experiences more interactive. Moreover, with the increasing use of data-driven decision-making processes, destination management becomes more sustainable and efficient (Gretzel et al., 2015). In this context, digitalization is not merely a technological development but also a strategic factor triggering the structural transformation of tourism.

5.1 Digital Tourism: Freedom or Control?

In the 21st century, digitalization has profoundly transformed the global tourism sector. Emerging digital technologies have facilitated access to tourism services, made travel planning faster and more efficient, and added a personalized dimension to user experiences (Gretzel et al., 2015). Tools such as online booking systems, user reviews, AI-powered recommendations, and mobile

applications significantly influence and guide tourists' decision-making processes. While this transformation appears to offer individuals more choices and freedom of movement on the surface, invisible digital mechanisms operating in the background control the travel experience (Zuboff, 2019).

This raises key questions: Are tourists truly free, or are they invisibly guided by digital platforms and algorithms? Does digitalization promote competition and pluralism in the tourism sector, or does it reinforce the dominance of a few major platforms, creating a new form of digital monopoly? Are user reviews and ratings genuinely under users' control, or are they part of the platforms' constructed and guiding strategies?

The seemingly liberating nature of digital tourism is, upon closer examination, intertwined with a form of digital governance. Algorithms not only provide recommendations based on user history but also control visibility and determine what information users can access (Beer, 2019). This undermines the independence of user choices, replacing the freedom of selection with the necessity of choosing among guided options. For instance, a high rating on Google Reviews for a tourist attraction may depend more on algorithmic promotion strategies than the actual quality of the site. Consequently, consumer behavior, though appearing to reflect individual preferences, is in fact shaped by big data-driven guidance processes.

Furthermore, although digitalization allows small-scale businesses to access global markets, the dominant role of large digital platforms (e.g., Booking.com, Airbnb, TripAdvisor) lays the groundwork for digital monopolization in the sector (Ert & Fleischer, 2019). These platforms have become key players in the tourism sector by controlling both content flow and the options presented to consumers.

Therefore, digitalization in tourism plays a dual role: liberating and controlling. This duality allows modern tourists to become more informed and empowered consumers while simultaneously integrating them into an unseen network of surveillance and guidance. This contradictory nature of digitalization necessitates a critical digital literacy perspective in sectoral analyses. Consequently, this duality is examined through three main mechanisms.

5.1.1 Price Control

The effects of digitalization in the tourism sector are not limited to facilitating access; they have also profoundly transformed pricing mechanisms. Dynamic pricing systems, commonly used in digital tourism, have replaced the traditional fixed-price approach with a system that fluctuates in real time (Chen et al., 2016). Dynamic pricing automatically updates the prices of services such as flights, hotels, and tour packages based on variables such as user behavior, demand level, location, time zone, device type, and search history.

While this system provides businesses with flexibility in marketing and revenue management, it often creates unpredictable and difficult-to-understand experiences for consumers. For example, two users searching for the same flight may encounter different prices solely based on location or device type (iPhone, Android), indicating that prices are determined more by algorithmic assessment than objective costs (Hannak et al., 2014). Such applications reveal the systematic manipulations behind digital tourism and create a “digital freedom illusion” for consumers: while users think they are making choices, they are actually subjected to system-driven guidance.

Dynamic pricing allows for third-degree price discrimination by offering different prices for the same service to different users. However, this discrimination often occurs without users' knowledge or consent. This opaque structure gives digital platforms a high level of control while weakening consumers' decision-making process (FTC, 2025).

Another major issue is the lack of transparency. Consumers often do not know how prices are determined, which data are used, or how these data are processed. The reasons for price changes and the algorithms' decision-making mechanisms remain hidden, creating an uncontrolled digital surveillance environment. Thus, consumers are reduced to mere data providers, while digital platforms maximize profits based on these data (Zuboff, 2019).

In conclusion, price control in digital tourism is not only shaped by supply and demand but also by the processing, classification, and guidance of user data. The lack of transparency in dynamic pricing systems raises ethical and consumer rights concerns, threatening the accountability and fair service delivery in digital tourism.

5.1.2 Rating and Review Monopoly

Digital reviews have increasingly become a powerful tool in shaping consumers' travel choices. Users' sharing of experiences through ratings and written reviews appears to represent a democratic content creation process. However, the visibility of these contents is largely shaped by algorithms controlled by digital platforms. This indicates that user participation is seemingly free but actually occurs within a restricted framework.

Online review platforms such as TripAdvisor, Google Reviews, and Booking.com shape visibility mechanisms according to both technical and commercial criteria. These platforms:

- They determine which reviews appear at the top through ranking algorithms,
- They provide marketing services to businesses that increase visibility and generate positive evaluations,
- They implement various “review policies” to suppress or limit negative content.

These algorithmic structures determine the visibility of users’ reviews not only based on content quality but also according to the commercial relationships between the business and the platform, the level of engagement, and spam filters (Luca & Zervas, 2015). As a result, review and rating systems, although giving the impression of transparency and participation to the consumer, are part of a commercialized and algorithmically controlled process governed by digital platforms. Even when users write reviews with the intention of sharing their experiences, these contents usually become visible or hidden through commercial filtering processes and algorithms. This situation restricts free access to information and transforms online reviews into tools of surveillance and guidance.

Indeed, research shows that despite robust filtering systems, 15% to 30% of reviews on online platforms can be manipulated (Cao, 2020). In hotels at highly preferred international destinations, it is suggested that one in every seven reviews may be fake (Aksoy & Günaydın, 2024).

For hotel businesses, the impact of online reviews affects not only reputation but also directly influences economic performance. Considering high investment costs and operational expenses,

businesses are expected to develop strategies to address reviews that could influence potential customers' decisions (Aksoy & Günaydın, 2024). In this context, some hotel managers may resort to review manipulation to protect their online reputation and gain an advantage over competitors.

The fact that a few platforms, such as Booking.com and Expedia, dominate the market has made hotel managers more dependent on these platforms, making online reputation management a critical factor for the hotel industry (Gössling et al., 2019).

Finally, Luca (2016) states that approximately 20% of five-star reviews on some platforms may have been purchased or manipulated. Manipulation is not limited to content creation; reviews can be bought, removed according to platform policies, or have their visibility reduced by algorithms. These findings demonstrate that online reviews are not merely tools reflecting individual experiences but are also content governed by economic and digital power.

5.1.3 Commission Obligation

Digital tourism platforms offer businesses access to a broad customer base, but this access comes with significant financial and structural costs. Online Travel Agencies (OTAs), such as Booking.com, Expedia, and Airbnb, provide their intermediary services in exchange for a commission. Commission rates impose substantial financial burdens, particularly on small and medium-sized enterprises, reducing profit margins and threatening long-term financial sustainability.

While large enterprises can absorb these high commission rates through operational economies of scale, for boutique hotels and local businesses, this presents an existential risk. Small-scale

actors who must remain visible via OTAs report a significant reduction in digital visibility when they turn to alternative sales channels. Many hotel operators in Turkey have noted that their search engine rankings decline and access to potential customers becomes limited when focusing on direct bookings. This situation can be interpreted as a digital “intimidation” or an indirect sanction imposed by platforms.

Especially, parity agreements, which prevent businesses from offering lower prices on their own websites than those on OTAs, constitute another significant control mechanism that limits competition. These agreements reinforce the monopolistic position of digital platforms and deprive businesses of pricing freedom. Countries such as Germany, France, and Italy have declared these practices illegal, taking important steps to ensure fair competition in digital markets.

The commission system, ostensibly based on mutual benefit between digital tourism actors and businesses, in practice creates a largely one-sided dependency. OTAs demand not only a financial fee but also a strategic control area in exchange for global access and visibility. Many aspects, from pricing strategies to digital visibility, are shaped within the rules established by these platforms.

In this context, freedom in digital tourism is often an illusion. Participation in OTAs under the guise of “freedom” effectively becomes a commission-based obligation, and actors wishing to exit the system face visibility loss, decreased bookings, and indirect sanctions.

5.2 AI-Managed Tourism Experience

Artificial intelligence technologies are increasingly playing an invisible yet impactful role in the tourism sector. From reservation processes to destination selection, and from review ranking to personalized recommendations, algorithms guide decision-making processes at numerous stages. This digital transformation raises questions about whether the tourist experience is being enhanced or constrained by AI. Additionally, the potential for visibility and perception to be directed by commercial or political motivations is another important topic of discussion (Zaman, 2025).

Therefore, the ways in which AI-based systems shape tourists' digital interactions are examined under two main headings.

5.2.1 Visibility Algorithms

Visibility algorithms are AI systems on digital tourism platforms that determine which content (e.g., hotels, tours, reviews, or destinations) will be prioritized and presented to users. These systems typically generate personalized content based on the following user data:

- Search and browsing history
- Geographical location information
- Demographic data
- Click and interaction habits
- Type of device used and time of Access

In light of these data, the personalized algorithmic filters provide users with visibility based on “relevance”. However, this also raises critical questions regarding the objectivity and transparency of information access.

5.2.1.1 Commercialized Visibility

In the tourism sector, digital visibility does not merely mean being noticed on digital platforms. The primary goal is to convert this visibility into commercial value—that is, not only capturing the attention of travelers but transforming them into actual customers. In the digital world, where millions of pieces of content are produced every minute, it is not enough for a tourism business to simply be “visible.” A hotel receiving likes on social media or a travel agency being mentioned in blogs may be significant, but true success is measured by whether these interactions translate into bookings, sales, or brand loyalty. In other words, visibility is meaningful only if it can directly generate revenue (Ekstrom, 2024).

In the post-Covid-19 era, with the increased time spent online, digital visibility has become almost a lifeline for tourism businesses. From large hotel chains to boutique establishments, everyone competes within the same digital space. In this competitive environment, it has become essential for SMEs, in particular, to design visibility strategies that directly serve commercial objectives (Oğurtanı, 2022). Therefore, the requirements for achieving commercialized visibility can be summarized as follows:

1. **Knowing the Target Audience:** The first step in converting digital visibility into revenue is to clearly define your target audience. Different groups—such as luxury travelers, backpackers, families, or digital nomads—have vastly different expectations and needs. Therefore, it is impossible to develop an effective digital strategy without analyzing the online habits and behaviors of your audience.

2. **Establishing Presence on the Right Channels:** Not every digital platform is suitable for every brand. The key is to strategically position yourself on platforms where your target audience is active. This ensures that your content reaches the right people at the right time, generating higher engagement.
3. **Creating Conversion-Oriented Content:** Visual aesthetics alone are not enough. Calls-to-action, special promotions, and booking prompts can directly transform your visibility into revenue. Your content should not only attract attention but also drive action.
4. **Data-Driven Measurement:** Which content generates more bookings? Which campaign increased occupancy rates? All digital activities should be analyzed regularly, and strategies should be continuously optimized based on the data obtained. Decisions grounded in data lead to sustainable success.

Today, a large portion of the global population is an active internet user, and a significant part of tourism-related decisions is shaped through digital channels. Therefore, digital visibility should be considered not merely as an aesthetic or access-oriented factor but as a strategic investment that directly contributes to commercial outcomes. With proper targeting, effective content, and data-driven optimization, digital presence can become a sustainable source of revenue for businesses.

5.2.1.2 Inequality in Access to Information

With the rise of digitalization, the ways individuals access information show significant disparities. Even for searches conducted in the same digital environment using the same keywords, users may encounter different results, creating a form of algorithmic inequality in accessing digital information. This is

particularly noteworthy in sectors like tourism, where digital visibility provides a competitive advantage (Pariser, 2011). Search engines and social media algorithms personalize content based on users' past behavior, location, language preferences, and device characteristics. These personalization practices present each user with a distinct digital reality, resulting in "different outcomes" despite the "same search" (Hannak et al., 2013).

In tourism, this can lead to considerable differences in access to information about destination choices, accommodation options, transportation, and local experiences. For instance, a search for "boutique hotel in İzmir" may yield vastly different hotel suggestions, prices, and review rankings for a user in Germany compared to a user in Turkey. Consequently, a user might complete their decision-making process without being exposed to alternative tourism products.

Digital visibility in tourism is strategically important not only for promotion or information purposes but also for its potential to convert into commercial gain. However, digital visibility is also shaped by factors such as digital advertising budgets, SEO investments, and compliance with platform algorithms (Xiang et al., 2017). While large-scale tourism enterprises and multinational platforms have access to these tools, local and small-scale businesses face the risk of digital invisibility. This demonstrates that digital competition in tourism is determined not only by service quality or customer experience but also by the algorithmic preferences of digital media platforms.

Ensuring fairness in access to digital information in the tourism sector requires a multi-actor and multi-level approach. Businesses need to diversify their content production strategies according to different user profiles, digital platforms should develop more

transparent and equitable content ranking systems, and users' digital literacy levels should be enhanced.

In particular, increasing the digital marketing capacity of local businesses and supporting their visibility within the context of sustainable tourism is crucial to reducing information access inequalities. Otherwise, algorithmic selections will not only create commercial imbalances but also threaten the visibility of cultural diversity and local destinations.

5.2.2 Perception Management

Perception management is the process of deliberately idealizing certain destinations, venues, or experiences in digital tourism environments. Social media platforms, AI-generated content systems, digital influencers, and visual marketing tools play a critical role in this process.

Social media and tourism platforms influence how tourists form preconceived notions about a destination. These preconceptions are often shaped by idealized, filtered representations that exclude problematic aspects of reality. For example:

- Crowds, queues, or unfavorable weather conditions are not shown in visuals.
- Challenges or infrastructure shortcomings are concealed.
- Only the 'perfect' moments are highlighted.

This situation can cause a mismatch between the perception created digitally and the physical reality experienced by tourists at the destination. Many so-called “hidden gems” that gain popularity on platforms like Instagram may, in reality, be difficult to access, crowded, and lacking proper infrastructure. Through

perception management, such places become a tourist bubble detached from reality.

Artificial intelligence technologies play a multi-layered role in creating this digital illusion. AI-supported tools can rearrange visuals, generate textual content, and manipulate search engine optimization. Cizrelioğulları and colleagues (2021) describe this phenomenon as the 'visual illusion industry.' The main digital intervention methods are as follows:

- Creation of unrealistic visuals (e.g., altering weather conditions, removing crowds),
- Manipulation of SEO through automatically generated blog posts,
- Modification of impressions in video content via adjustments in sound, color, and speed.

Through such practices, digital content creators and destination managers hold the power to direct tourists' attention to specific elements, thereby guiding their behavior. As a result, the emphasis shifts from the reality the tourist will experience to the digital image intended for consumption. When a mismatch occurs between the idealized images created in the digital environment and the physical experience, various negative consequences emerge:

- ***Experience clash:*** The tourist experiences dissatisfaction due to the discrepancy between what is seen digitally and what is encountered on-site.
- ***Psychological effects:*** Unmet expectations may generate feelings of guilt, regret, or disappointment.
- ***Local conflicts:*** Digitally created artificial attractions can lead to overtourism pressures, causing tension between tourists and the local population (Aksu & Dönmez, 2024).

In addition, the personalization claims of AI-powered systems often shape tourists' decisions through the limited options presented by algorithms. As a result, visibility is placed under algorithmic control, tourists' freedom of choice is reduced, and travel routes are confined within a digitally predefined framework (Stylidis, 2020).

Perception management in tourism has gone far beyond traditional promotional methods under the influence of digitalization. Social media, artificial intelligence, and visual content production are systematically used to enhance the attractiveness of destinations, creating a virtual experience environment increasingly detached from reality. This new structure in digital tourism brings both opportunities and significant ethical and social challenges. Therefore, in the future of tourism, digital perception management strategies must be addressed not only from a marketing perspective but also in terms of sustainability, ethics, and psychological impacts.

5.3 Metaverse and Virtual Tourism

Recent rapid developments in digital technologies have fundamentally transformed the tourism experience. The widespread adoption of augmented reality (AR), virtual reality (VR), and metaverse technologies has made it possible for individuals to experience a destination without physically traveling there. Initially, the concept of "seeing without going" was limited to documentaries and tools like Google Earth; today, it has gained a far more interactive and immersive dimension through metaverse-based virtual reality applications (Guttentag, 2010).

Nowadays, users can stroll through the streets of Paris with VR equipment, explore the interior of Hagia Sophia in 360 degrees,

or meditate virtually at a temple in Japan. The fact that these experiences require no physical travel, visa procedures, or accommodation planning has led to a redefinition of tourism not only in spatial but also in temporal terms.

Although metaverse-supported tourism applications offer advantages in terms of accessibility, cost, and sustainability, this transformation also raises some fundamental questions. These include:

- Can virtual tourism replace physical tourism?
- Does the metaverse carry the potential for addiction in individuals, or does it democratize tourism, making it more accessible?
- Does this new form of experience pose a risk of weakening individuals' attachment to physical reality?

Based on these questions, the metaverse-based virtual tourism is examined through two main dimensions: addiction and the transformation of digital economy and identity.

5.3.1 Addiction

Increasing time spent in the metaverse not only poses a risk of individual-level addiction but also triggers various transformations in social, psychological, and cultural contexts. Especially young users may tend to construct an idealized identity in virtual environments, distancing themselves from the limitations and challenges of physical reality. This turns digital tourism experiences into more than just information-gathering or entertainment activities, functioning instead as a form of escape (Baudrillard, 1994).

Avatars created in the virtual environment, digital identities that can be customized according to personal preferences, and reimagined destination experiences offer users a high sense of control and satisfaction. However, this artificial satisfaction may gradually lead to desensitization toward real-world experiences. Users may prefer to “visit” the same destination virtually multiple times on the metaverse rather than overcoming the logistical and financial challenges of physical travel. This may result in individuals distancing themselves not only from physical spaces but also from social relationships and societal participation.

With the increasing influence of digital tourism, individuals’ travel practices and their relationship with tourism are undergoing significant transformation. The high accessibility, personalization, and control offered by virtual environments such as the metaverse create a strong attraction that can pull users away from traditional forms of tourism. This may lead to excessive engagement or addiction-like behavior patterns toward digital tourism in some individuals. Travel experiences in virtual environments affect not only physical mobility but also social relationships, psychological balance, and economic consumption habits.

In this context, to analyze the effects of digital tourism practices on individuals, certain observable indicators of engagement and addiction can be identified. The following table presents the main signs and explanations of these indicators:

Tablo 2. Indicators of Digital Engagement in Tourism

Indicator	Description
Decreased interest in physical tourism	The increase in Metaverse and VR-based experiences may create a “I’ve already seen it” feeling in individuals. Experiences obtained in virtual

	environments can reduce interest in real locations or delay visit plans.
Withdrawal from social interaction	As time spent in digital tourism environments increases, an individual's physical relationships with their social circle weaken. This can trigger loneliness and social disconnection.
Dissatisfaction with reality	The high level of control and idealized experiences in virtual environments can lead to disappointment when facing real-life challenges. This may reduce satisfaction with actual experiences.
Increased economic expenditure	Digital spending replaces physical travel costs, including VR equipment, in-Metaverse purchases, and NFT-based travel packages. New digital consumption patterns emerge.

The table provides a fundamental framework for understanding the development of digital attachment behaviors in individuals. These indicators reveal how virtual experiences, which are replacing physical tourism, shape user behavior. Especially with the increasing prevalence of VR- and Metaverse-based applications, individuals' travel habits, social relationships, perceptions of reality, and consumption practices are undergoing significant changes.

5.3.2 Digital Identity, NFTs, and the Virtual Economy

With the advancement of digital technologies, the ways individuals express themselves are increasingly becoming independent of their physical identities. Digital environments such as the Metaverse allow individuals to create constructed digital identities (avatars) distinct from their physical presence, introducing the concepts of "multiple identities" or "virtual self" (Turkle, 2011). In the context of tourism experiences, users in virtual tourism environments not only explore destinations but also reconstruct their tourist identities, displaying these identities

on digital platforms to gain social validation, interaction, and a sense of belonging.

The commercialization of these digital identities has gained a new dimension through NFT (Non-Fungible Token) technologies. Users can purchase virtual museum tickets, digital tour souvenirs, collectible items, or avatar accessories as NFTs within Metaverse environments, thereby personalizing their digital experiences while also assigning them economic value. As such, digital tourism evolves not merely as an alternative to physical travel but also as a new form of consumption grounded in crypto-economics.

The uniqueness and ownership guarantees provided by NFTs facilitate the monetization of digital experiences and create digital forms of class distinctions and access inequalities. For instance, access to some virtual destinations may be restricted to holders of special NFT tickets, and certain avatar features can serve as indicators of social status (Anaya-Sanchez et al., 2024). This mirrors privileged experiences in physical tourism, such as luxury tours or private guided services, in the digital realm.

Moreover, the Metaverse economy extends beyond individual consumption, supporting the emergence of new professions such as content creators, digital guides, and virtual architects. Consequently, digital tourism becomes an interactive space where users move beyond passive consumption and actively participate in the digital production economy.

However, this digital transformation carries certain risks. Digital identities may drift away from the real self and become “objects of display,” potentially leading to psychological issues such as false perceptions of success, identity confusion, and social comparison. NFT-based virtual consumption can also incentivize

individuals to allocate economic resources toward digital visibility and prestige rather than physical needs (Kuss & Griffiths, 2017).

In conclusion, the creation of digital identities and NFT-centered economic practices transform virtual tourism into a multilayered arena where identity, economy, and socialization practices are redefined. This transformation necessitates that digital tourism policies address not only technological but also ethical, cultural, and sociological dimensions.

CONCLUSION AND GENERAL ASSESSMENT

The integration of digital technologies into the tourism sector has made nearly all stages of the travel experience—planning, booking, transportation, accommodation, and feedback—manageable through digital platforms. This process provides tourists with speed, convenience, and personalized service advantages while enhancing the global visibility of destinations and opening new market opportunities for local businesses. Virtual tours and augmented reality applications enrich visitor experiences, facilitating access to information and decision-making processes. AI-supported systems improve service quality by analyzing users' past preferences and offering more suitable and engaging options.

However, when evaluated alongside concepts such as surveillance capitalism, algorithmic power, and digital authority, it becomes evident that digitalization is not merely a tool for efficiency but a mechanism that reshapes individual freedoms, privacy, and competitive conditions. The systematic collection of user data for commercial and administrative purposes, the prediction and steering of behaviors, and the phenomena of “experience standardization” and “digital hierarchy” emerge as

consequences. This can reduce the visibility of unique destinations and small-scale businesses, narrowing cultural diversity and making tourists unknowingly dependent on algorithmic guidance in their decision-making processes.

Digital authority is not solely an economic issue but also a political and ethical one. In authoritarian regimes or on platforms with weak regulation, algorithms can be used for surveillance, censorship, and disinformation, weakening democratic discourse and threatening individual autonomy. As emphasized by thinkers from Michel Foucault's panopticon metaphor to Zuboff's theory of surveillance capitalism, digital surveillance regulates not only external behavior but also internal preferences and cognitive processes. Therefore, digitalization in tourism is not merely a technological trend but also an ethical and legal governance issue.

To manage this transformation effectively, industry stakeholders must develop policies and strategies in three key areas: first, ensuring transparency in data management and privacy standards in line with international norms; second, establishing mechanisms for algorithmic transparency and accountability; and third, creating fair competition conditions that support the visibility of small and local actors on digital platforms. This framework is critical for protecting both user rights and the sector's sustainability.

Additionally, at the level of digital citizenship, individuals must be educated in digital literacy, ethics, and security, while tourism employees should be equipped with digital proficiency and technology-based problem-solving skills. This approach can reduce the risks of surveillance and manipulation while making tourism experiences more transparent, fair, and inclusive.

In conclusion, the digitalization of tourism is an irreversible reality and one of the core dynamics shaping the sector's future. Preventing this process from evolving into a "digital dictatorship" requires the use of technology in accordance with ethical principles and human rights. Tourism stakeholders and policymakers must design digital infrastructures not solely as efficiency- and profit-oriented tools but as ecosystems that reinforce democratic values, cultural diversity, and individual freedoms. In this way, digital technologies can move beyond tools of surveillance and manipulation to become foundational supports for building a fair and sustainable future in tourism.

REFERENCES

- Akgöz, E., Karagöz, B.S., El, M. N. & Akin, B. (2024). Interpreting EWOM evaluations using AHP and TOPSIS methods and determining the most suitable Cyprus hotel. *Journal of Business Academy*, 5(3), 224-240. <https://doi.org/10.26677/TR1010.2024.1458>
- Akin, M.S. (2014). *Pazarlama araştırmacıları perspektifinden nöropazarlama: kişisel bir araştırma*. Yüksek Lisans Tezi, Sakarya Üniversitesi, Sakarya.
- Akpur, A. (2022). Turizmde nöropazarlama. İçinde Turizmin Geleceği (ss. 172-193).
- Akpur, A. (2023). Seyahat danışmanı olarak chatgpt'nin yeteneklerini keşfetmek: Turizm pazarlamasında üretken yapay zekâ üzerine bir araştırma. *International Journal of Contemporary Tourism Research*, 7(2), 93-105. <http://doi.org/10.30625/ijctr.1325428>
- Akpur, A. & Zengin, B. (2020). Turizmde nöropazarlamanın pazarlama karmaşıklığında kullanımına ilişkin literatür incelemesi. *Journal of Tourism and Gastronomy*, 8(3), 2353-2373. <https://doi.org/10.21325/jotags.2020.664>
- Akpur, A. & Zengin, B. (2022). Turizm nöropazarlamasında bilişsel aktivite ölçüm yöntemlerinin kullanımına yönelik bir betimsel analiz. *Güncel Turizm Araştırmaları Dergisi*, 6(2), 698-715. <https://dx.doi.org/10.32572/guntad.1114070>
- Akpur, A., Zengin, B. & Çakar, T. (2025). Havayolu reklamlarında izleyicilerin duygu ölçümü: Microsoft Azure Face API ile yüz kodlama uygulaması. *İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi*, 12(1), 190-202. <https://doi.org/10.17336/igusbd.1434670>

- Aksoy, F., & Günaydın, Y. (2024). Resort Otellerde Çevrim İçi Yorum Manipülasyonu. *GSI Dergileri Seri A: Turizm, Rekreasyon ve Spor Bilimlerinde Gelişmeler*, 7(1), 16-31. <https://doi.org/10.53353/atrss.1302316>
- Aksu, S., & Dönmez, İ. (2024). Yapay Zekâ Çağında Tüketici Davranışı - Dijital Profiller ve Büyük Verinin Etkisi. Ankara: Nobel Bilimsel Eserler.
- Aktan, E. & Koçyiğit, M. (2016). Sosyal medya'nın turizm faaliyetlerindeki rolü üzerine teorik bir inceleme. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, Özel Sayısı, 62-73. <https://dergipark.org.tr/tr/pub/dpusbe/issue/31354/346199>
- Alguer, A.O. & Çizel, B. (2021). Sosyal medya aracılığıyla turizm deneyimi paylaşma motivasyonunu etkileyen faktörlerin incelenmesi. *Journal of Hospitality and Tourism Issues*, 3(2), 153- 175. <https://doi.org/10.51525/johti.1029430>
- Altınpınar, H. H., Kiraz, F., Özgül, O., Foto, Ö. & Baldir, M. (2024). Mobil uygulamalar ve turizm: Keşfet Aksaray gezi rehberi önerisi. *Aksaray Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8(2), 101-127. <https://doi.org/10.38122/ased.1598381>
- Altun, T., Şahin, F. & Öztaş, N. (2017). Kamu politikalarının belirlenmesi ve uygulanmasında büyük veri. *Süleyman Demirel Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, 22(Kayfor 15 Özel Sayısı), 2021-2044. <https://dergipark.org.tr/tr/pub/sduibfd/issue/53208/710661>
- Anaya-Sanchez, R., Rejon-Guardia, F., & Molinillo, S. (2024). Impact of virtual reality experiences on destination image and visit intentions: the moderating effects of immersion, destination familiarity and sickness. *International Journal of Contemporary Hospitality Management*, 36(11), 3607-3627. <https://doi.org/10.1108/IJCHM-09-2023-1488>
- Anik, M.A., Rahman, A., Wasi, A.T. & A. M.M. (2025). Preserving cultural identity with context-aware translation through multiagent AI systems. Proceedings of the 1st Workshop on Language Models for Underserved Communities (LM4UC 2025), 51–60. <https://arxiv.org/html/2503.04827v1>.
- Arslan, S. & Gülenç Birsen, A. (2025). Turizmde veri bazlı akıllı öneri sistemleri. İçinde A. Ünal, E. Örgün ve E. Çilesiz (Ed), Turizm ve Destinasyon Araştırmaları XI (ss. 335-358). Pa Paradigma Akademi: Çanakkale.
- Arslantaş, E. (2025). Dijital bölünmenin tarihsel materyalizm yaklaşımı çerçevesinde değerlendirilmesi. *Siber Politikalar Dergisi*, 10(19), 16-34. <http://www.cyberpolitikjournal.org/index.php/main/article/view/209>
- Asiltürk Okutan, Y. (2024). Dijital dönüşümün turizme yansımaları: avantaj ve dezavantajlarıyla turizm işletmelerinde yapay zekâ kullanımı. *Bozok Sosyal Bilimler Dergisi*, 3(2), 52-65. <https://dergipark.org.tr/tr/pub/bozoksbd/issue/88274/1491433>
- Asiltürk Okutan, Y. (2024). Turizm pazarlamasında yapay zeka inovasyonu. İçinde A. Taşbaşı, Sosyal ve Beşeri Bilimler Araştırmaları (ss.39-54). Akademisyen Kitabevi.
- Aşroğlu, B. & Çuhadar, M. (2021). Üniversite öğrencilerinin destinasyon imajı algısı üzerinde sosyal medyanın etkisi: lavanta turizmi örneği. *Türk Turizm*

- Araştırmaları Dergisi*, 5(2), 925-945.
<https://doi.org/10.26677/TR1010.2021.746>
- Avcı, C. & Meydan Uygur, S. (2022). Nöropazarlama yaklaşımının etik açıdan değerlendirilmesi. *Turizm Akademik Dergisi*, 9(2), 431-446.
<https://dergipark.org.tr/tr/pub/touraj/issue/73968/1116176>
- Aydınlı, F. & Akgöz, E. (2024). Teknoloji bağımlılığı ve dijital detoks turizmine karşı tutum ve motivasyonlar: turizm akademisyenleri tarafından bir değerlendirme. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 27 (1), 357-370.
<https://dergipark.org.tr/tr/pub/selcuksbmyd/issue/84418/1453630>
- Azadaliyev, S. & Demirkol, Ş. (2023). Turizm sektöründe artırılmış gerçeklik ve dijital dönüşümün değerlendirilmesi. *Turizm Çalışmaları Dergisi*, 5(1), 11-26.
<https://dergipark.org.tr/tr/pub/tucade/issue/81197/1346832>
- Baciu, A.B. (2020). Medical and social consequences of digital addiction. *Medical Anthropology. The Publishing House of the Romanian Academy*, 22(3), 141-147.
- Baran, Z. & Baran, H. (2021). Dijital teknolojiler bağlamında turistik gezilerin yeni gerçekliği: sanal uzam. *Sivas İnterdisipliner Turizm Araştırmaları Dergisi*, 4(2), 175-188. <http://sita.cumhuriyet.edu.tr/tr/pub/issue/66439/1028074>
- Başkaya, F. & Karacan, H. (2022). Yapay zekâ tabanlı sistemlerin kişisel veri mahremiyeti üzerine etkisi: sohbet robotları üzerine inceleme. *Bilişim Teknolojileri Dergisi*, 15(4), 481-491.
<https://doi.org/10.17671/gazibtd.1053803>
- Beer, D. (2009). Power through the algorithm? Participatory web cultures and the technological unconscious. *New Media & Society*, 11(6), 985-1002.
<https://doi.org/10.1177/1461444809336551>
- Beer, D. (2019). *The Data Gaze: Capitalism, Power and Perception*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526463210>
- Bella, G., Helm, P. Koch, G. & Giunchiglia, F. (2023). Towards bridging the digital language divide. <https://doi.org/10.48550/arXiv.2307.13405>
- Bhuvaneswari, N. (2024). Customer Engagement in Digital Marketing. V. Verma, K. K. Kanoujiya, & P. Chaurasiya içinde, *Navigating the Digital Landscape: A Guide to Management and Commerce in the 21st Century* (s. 270-276). New Delhi: Bharti Publications.
- Biçer, D. & Akgüre, E.Y. (2022). Gösterişçi tüketim eğiliminin tatil satın alma niyetine etkisi. *Uluslararası Akademik Birikim Dergisi*, 5(5), 365-376.
<https://akademikbirikimdergisi.com/index.php/uabd/article/view/70>
- Bindesen, M.A. (2025). Dijital kaçış: Teknolojiyle rekreasyonun yeni sınırlar. İçinde V. Alaeddinoğlu, Y.S. Biricik, M.H. Sivrikaya, Ş. Dertli, (Ed). *Dijitalleşen Dünyada Rekreasyon ve Spor Yönetimi Araştırmaları*. Özgür Publications: Gaziantep. <https://doi.org/10.58830/ozgur.pub796>
- Biricik, Z. (2022). Dijital bağımlılıklar ve dijital bağımlılıklardan kurtulma yolu olarak dijital minimalizm. *The Turkish Online Journal of Design Art and Communication*, 12 (3), 897-912.
<https://dergipark.org.tr/tr/pub/tojdac/issue/70236/1113188>

- Bolat, A.G. (2024). Teknoloji ile beraber ortaya çıkan dijital fırsat eşitsizliği. İçinde Ş.E. Erben (Ed), *Yeni Medyanın Ekonomi Politikası* (ss. 25-35). Eğitim Yayınevi: Konya.
- Boyacı Yıldırım, M. (2024). Medya bağımlılığı ve dijital detoks: dijital çağda sağlıklı medya kullanımı üzerine bir inceleme. İçinde S. Akova Havalı (Ed), *Dijital Bağımlılık Üzerine Güncel Tartışmalar* (ss. 89-130). Berikan Yayınevi: Ankara.
- Boz, N. ve Serinkan, C. (2022). Türkiye’de dijital girişimcilik ve KOBİ’ler. *Girişimcilik İnovasyon ve Pazarlama*, 6(2), 102-107. <https://doi.org/10.31006/gipad.1204002>
- Bozkurt, İ. (2024). Pazarlama iletişimde bilinçli farkındalık: nöropazarlama araştırmalarına sistemsel bir bakış. *Pamukkale Üniversitesi İletişim Bilimleri Dergisi*, 3(2), 288-307. <https://doi.org/10.70559/pauibd.1602382>
- Bradshaw, S., & Howard, P. N. (2018). *Challenging Truth and Trust: A Global Inventory of Organized Social Media Manipulation*. Oxford Internet Institute. University of Oxford.
- Buhalis, D., & Amaranggana, A. (2015). Smart Tourism Destinations Enhancing Tourism Experience Through Personalisation of Services. *Information and Communication Technologies in Tourism 2015* (s. 377-389). Springer Nature. https://doi.org/10.1007/978-3-319-14343-9_28
- Büyükepekcı, S. & Öztürk, G. (2023). Konaklama İşletmelerinde Pazar yönlülük ve İnovasyonun Finansal Performans Üzerindeki Etkisi, *S. Ü. Sosyal Bilimler Meslek Yüksekokul Dergisi*, 26(2), 370-389. <https://doi.org/10.29249/selcuksbmyd.1328535>
- Cabi Bilge, A. (2023). Bir yapay zekâ destekli dil modeli olan chatgpt’nin turizm sektöründe potansiyel ve hayata geçen uygulamaları. *Journal of Recreation and Tourism Research*, 10(3), 139-155. <https://doi.org/10.5281/zenodo.8393590>
- Calderón-Fajardo, V., Anaya-Sánchez, R., Rejón-Guardia, F., & Molinillo, S. (2024). Neurotourism insights: eye tracking and galvanic analysis of tourism destination brand logos and AI Visuals. *Tourism & Management Studies*, 20(3), 53-78. <https://doi.org/10.18089/tms.20240305>
- Chatzopoulou, I. (2021). GDPR and tourism: legal framework, compliance and implications for the tourism industry. *Journal of International Scientific Publications-Economy & Business*, 15, 125-133.
- Chen, J., Shoval, N. & Stantic, B. (2024). Tracking tourist mobility in the big data era: insights from data, theory, and future directions. *Tourism Geographies*, 26(8), 1381-1411. <https://doi.org/10.1080/14616688.2024.2341249>
- Chen, L., Mislove, A., & Wilson, C. (2016). An Empirical Analysis of Algorithmic Pricing on Amazon Marketplace. *WWW’16:25th International World Wide Web Conference* (s. 1339-1349). International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva. <https://doi.org/10.1145/2872427.2883089>
- Chen, X., Yang, Y., Bilgihan, A. & Liu, W. (2025). Eyeing the pun: an eye-tracking study on the synergistic effects of visual and textual elements in tourism

- advertising. *Journal of Hospitality and Tourism Technology*, 16(4), 684-704. <http://dx.doi.org/10.1108/JHTT-07-2024-0402>
- Cheong, R. (1995). The virtual threat to travel and tourism. *Tourism Management*, 16(6), 417-422. [https://doi.org/10.1016/0261-5177\(95\)00049-T](https://doi.org/10.1016/0261-5177(95)00049-T)
- Choi, J. & Kim, I. (2018). The relationship between local employment growth and regional economic growth: Evidence from Korea. In M. Hosoe, I. Kim, M. Yabuta, and W. Lee (Eds.). *Applied analysis of growth, trade, and public policy* (pp. 35-43). Springer Singapore.
- Chu, M., Chen, Y., Yang, L. & Wang, J. (2022). Language interpretation in travel guidance platform: Text mining and sentiment analysis of TripAdvisor reviews. *Frontiers in Psychology* 13. <https://doi.org/10.3389/fpsyg.2022.1029945>
- Cigerci, E. (2025). Sanal yolculuklar, gerçek deneyimler: AR / VR ile yeni nesil turizm pazarlaması. *Uluslararası Akademik Birikim Dergisi*, 8(2), 307-318. <https://doi.org/10.5281/zenodo.15077459>
- Cizreligulları, M.N., Altun, Ö. & Babayiğit, M.V. (2021). Nöropazarlama yaklaşımının turistlerin davranışları üzerindeki etkisi: turizm sektörü örneği. *Journal of Tourism and Gastronomy Studies*, 9(3), 1932-1952. <https://doi.org/10.21325/jotags.2021.875>
- Coşkun, P. & Yücel, A., (2017). Kültürel Turizmin Gelişmesinde Nöropazarlamanın Etkisinin Kuramsal Olarak İncelenmesi. I. Uluslararası Kültür ve Medeniyet Kongresi, (7-10 Aralık 2017 Mardin), Mardin, 34-46.
- Couldry, N., & Mejias, U. A. (2019). *The Costs of Connection: How Data is Colonizing Human Life and Appropriating it for Capitalism*. Stanford University Press.
- Creutzburg, R., Hagen, D. & Hasche, E. (2021). Virtual reality, augmented reality, mixed reality & visual effects: New potentials by event technology for the Immanuel Kant Anniversary 2024 in. August.
- Çelikel, S. (2021). Kişisel verilerin işlenmesinde, açık rıza hukuka uygunluk nedeninin, 95/46 sayılı direktif ve GDPR'la karşılaştırmalı olarak incelenmesi. *Uyuşmazlık Mahkemesi Dergisi* 19(17), 161-190. <https://doi.org/10.18771/mdergi.957894>
- Çevik, E. & Toplu, M. (2023). Dijital eşitsizliğin hibrit eğitimdeki yansımaları. *Türk Kütüphaneciliği*, 37(4), 267-292. <https://doi.org/10.24146/tk.1356841>
- Çiçek, E. & Dıvrak Doğan, E. (2025). Dijital pazarlama kapsamında otellerin sosyal medya kullanımları: Instagram üzerine bir araştırma. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 28(1), 78-94. <https://doi.org/10.29249/selcuksbmyd.1586306>
- Çiçeklioğlu, A. Ş. (2024). Habere çevrim içi erişimde yeni dönem: kişiselleştirilmiş haber uygulamaları. *Kritik İletişim Çalışmaları Dergisi*, 6(1), 99-130. <https://doi.org/10.53281/kritik.1438306>
- Çolakoğlu, Ü. & Samancı, İ.C. (2024). Sürdürülebilir turizm ve dijitalleşme. İçinde Ö. Yayla (Ed), *Turizmde Güncel Gelişmeler* (ss. 148-158). Çizgi Kitabevi Yayınları: Konya.

- Dağ, K. & Çavuşoğlu, S. (2024). Artırılmış gerçeklik pazarlaması: Turizm sektörü. İçinde A. Ünal, E. Çilesiz ve O. Çelen (Ed), Turizm ve Destinasyon Araştırmaları VIII (ss. 69-87). Pa Paradigma Akademi: Çanakkale.
- Dede, A. (2024a). Dijital iletişim, dijital vatandaşlık, dijital yönetim ve CİMER. *Abant Sosyal Bilimler Dergisi*, 24(1), 355- 365. <https://doi.org/10.11616/asbi.1396928>
- Dede, A. (2024b). Dijital vatandaşlığın dokuz boyutu ve e-devlet uygulamaları. *EKEV Akademi Dergisi* (97), 15-27. <https://doi.org/10.17753/sosekev.1365162>
- Deibert, R. J. (2013). *Black Code: Surveillance, Privacy, and the Dark Side of the Internet*. Signal/McClelland&Random House.
- Demir, D. & Dalaylı, F. (2025). Yeni medyada kamusal alanın yeniden inşası: katılımcı kültür ve algoritmik yönlendirme arasında bir denge mümkün mü? 1 st International Conference on Pioneer and Academic Research, June, 13-14, Konya, Türkiye.
- Demir, P. Y. (2025). Reklamcılıkta kişisel verilerin korunması: "algoritmik rıza yorgunluğu" ve tüketici otonomisinin geri kazanımı. *Tirebolu İletişim Fakültesi Akademik Dergisi*, 2(2), 252-282. <https://dergipark.org.tr/tr/pub/tirad/issue/93880/1716964>
- Dijk, J. v. (2014). Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), 197-208. <http://library.queensu.ca/ojs/index.php/surveillance-and-society/article/view/datafication> adresinden alındı
- Dijk, J. v. (2021). The Digital Divide. *Journal of the Association for Information Science and Technology (JASIST)*, 72(1), 136-138. <https://doi.org/10.1002/asi.24355>
- Dilsiz, V. (2021). Dijital dünyada kişisel veri kavramı ve KVKK / GDPR kapsamında bir değerlendirme. İstanbul Marka Bilim Topluluğu. <http://istanbulmarka.science/dijital-dunyada-kisisel-veri-kavrami-vekvkk-gdpr-kapsaminda-bir-degerlendirme/>
- Dinç, L. & Bayrak, B. (2025). Sanal gerçeklik. İçinde E. Çilesiz ve A. Ünal (Ed), Teknoloji ve Turizm (99-116). Pa Paradigma Akademi: Çanakkale.
- Doğan, S. & Eker, Ş. (2022). Geleneksel seyahat acentelerinin çevrim içi seyahat acentelerini tercihi üzerine bir araştırma. *Journal of Recreation and Tourism Research*, 9(1), 16-32. <https://doi.org/10.5281/zenodo.6397464>
- Duğan, Ö. & Aydın, B. O. (2018). Sosyal medyanın turizmde tanıtım amaçlı kullanımı: T.C. Kültür ve Turizm Bakanlığı örneği. *Uluslararası Türk Dünyası Turizm Araştırmaları Dergisi*, 3(1), 1-13. <https://dergipark.org.tr/tr/pub/tdad/issue/38069/347607>
- Durmuşahmet, A. (2021). Büyük veri reklamlarında ikna sürecinin çift süreç teorileri bağlamında incelenmesi. *Uluslararası Medya ve İletişim Araştırmaları Hakemli Dergisi*, 4(1), 96-116. <https://doi.org/10.33464/mediaj.862147>
- Dülgeroğlu, O. (2023). Dijitalleşen turizm. İçinde L. Karadağ ve G. Özgürel (Ed) Teorik Yaklaşımlarla Disiplinlerarası Turizm Araştırmaları (ss. 78-93). Detay Yayıncılık: Ankara.

- Ekstrom, S. (2024). *AI for Sustainable and Responsible Tourism: Insights from AI Governance and Ethics*. 8 30, 2025 tarihinde https://blog.learnntourism.org:https://blog-learnntourism-org.translate.google/ai-for-sustainable-and-responsible-tourism-insights-from-ai-governance-and-ethics?utm_source=google&utm_medium=ppc&utm_campaign=tourism_ambassador&utm_term&utm_term&utm_campaign=Tourism+Ambassador+Programs&utm_ adresinden alındı
- Ergun, N., Bayrak, R. & Doğan, S. (2019). Turizm pazarlaması için önemli bir pazarlama kanalı olan Instagram’da nitel bir araştırma. *Güncel Turizm Araştırmaları Dergisi*, 3(1), 82-100. <https://doi.org/10.32572/guntad.463866>
- Erkan, H., Türkmen, G., Gürsoy, E., Baki, A. & Şimşek, N. (2024). Dijital bağımlılığın öğrencilerde olumsuz etkileri ve çözüm yolları. *International QMX Journal*, 3(9), 2036-2049. <https://doi.org/10.5281/zenodo.13847127>
- Erol, G. & Hassan A. (2014). Gençlerin sosyal medya kullanımı ve sosyal medya kullanımının tatil tercihlerine etkisi. *The Journal Of International Social Research*, 7(31), 804-813.
- Eröz, S. S. & Doğdubay, M. (2012). Turistik ürün tercihinde sosyal medyanın rolü ve etik ilişkisi. *Dokuz Eylül Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, 27(1), 133-157. <https://dergipark.org.tr/tr/pub/deuiibfd/issue/22729/242576>
- Ert, E., & Fleischer, A. (2019). The Evolution of Trust in Airbnb: A Case of Digital Reputation. *Annals of Tourism Research*, 75, 279-287. <https://doi.org/10.1016/j.annals.2019.01.004>
- Erul, E. & Işın, A. (2023). ChatGPT ile sohbetler: turizmde ChatGPT’nin önemi. *Journal of Tourism and Gastronomy Studies*, 11(1), 780-793. <https://doi.org/10.21325/jotags.2023.1217>
- Eryılmaz, B. & Şengül, S. (2016). Sosyal medyada paylaşılan yöresel yemek fotoğraflarının turistlerin seyahat tercihleri üzerindeki etkisi. *Uluslararası Türk Dünyası Turizm Araştırmaları Dergisi*, 1(1), 32-42. <https://dergipark.org.tr/tr/pub/tdtdad/issue/21282/228457>
- Eryılmaz, B. & Yüçetürk, C. (2018). Genç turistlerin doğu ekspresi seferleri tercihlerinde Instagram’ın rolü. *Journal of Tourism and Gastronomy Studies*, 6(4), 210-228. <https://doi.org/10.21325/jotags.2018.305>
- Eryılmaz, H. E. (2023). Yapay zekâ çağında kişisel veri mahremiyeti. *UMAY Sanat ve Sosyal Bilimler Dergisi*, 1(2), 6-25. <https://dergipark.org.tr/tr/pub/umay/issue/81365/1357617>
- Feldstein, S. (2021). *The Rise of Digital Repression: How Technology is Reshaping Power, Politics, and Resistance*. Oxford University Press. doi:10.1093/oso/9780190057497.001.0001
- Filieri, R., Acikgoz, F., Ndou, V. & Dwivedi, Y. (2020). Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers’ continuance intention. *International Journal of Contemporary Hospitality Management*, 33(1), 199-223. <https://doi.org/10.1108/IJCHM-05-2020-0402>

- Foucault, M. (2020). *Discipline And Punish: The Birth Of The Prison*. Penguin Classics.
- FTC. (2025). Federal Trade Commission Issues Request for Information on Employee Noncompete Agreements. <https://www.ftc.gov/news-events/news/press-releases/2025/09/federal-trade-commission-issues-request-information-employee-noncompete-agreements>. Erişim Tarihi: 01.10.2025
- Gao, Y., Liu, S., Wei, B., Zhu, Z. & Wang, S. (2024). Using Wi-Fi probes to evaluate the spatio-temporal dynamics of tourist preferences in historic districts' public spaces. *ISPRS Int. J. Geo-Inf.*, 13, 244. <https://doi.org/10.3390/ijgi13070244>
- Gedik, Y. (2021). Endüstri 4.0 Teknolojilerinin ve Endüstri 4.0'ın üretim ve tedarik zinciri kapsamındaki etkileri: teorik bir çerçeve. *Journal of Emerging Economies and Policy*, 6(1), 248-264. <https://dergipark.org.tr/tr/pub/joeep/issue/60112/776278>
- Gedik, Y. (2023). Turizm sektöründe sosyal medya pazarlaması avantajları, zorlukları ve stratejileri üzerine kavramsal bir değerlendirme. *Turizm Ekonomi Ve İşletme Araştırmaları Dergisi*, 5(2), 297-316. <https://dergipark.org.tr/tr/pub/turek/issue/82320/1357897>
- Gillespie, T. (2014). The Relevance of Algorithms. T. Gillespie, P. J. Boczkowski, & K. A. Foot içinde, *Media Technologies: Essays on Communication, Materiality, and Society*. <https://doi.org/10.7551/mitpress/9780262525374.003.0009>
- Göker, G. & Keskin, S. (2015). Sosyal medya türevi olarak sosyal içerik platformları: Betimsel bir inceleme. *Journal of International Social Research*, 8(39), <https://www.sosyalarastirmalar.com/articles/social-content-platforms-as-a-social-media-type-a-descriptive-review.pdf>
- Görgün Baran, A. & Erdem, M.T. (2017). Bilgi toplumunda dijital bölünme: Bilişim ve iletişim teknolojileri kullanım yetenekleri üzerinden bir tartışma. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 22(15), 1505-1518. <https://dergipark.org.tr/tr/pub/sduiibfd/issue/53208/706706>
- Gössling, S., Zeiss, H., Hall, C. M., Martin-Rios, C., Ram, Y., & Grøtte, I.-P. (2019). A cross-country comparison of accommodation manager perspectives on online review manipulation. *Current Issues in Tourism*, 22, 1744-1763. <https://doi.org/10.1080/13683500.2018.1455171>
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart Tourism: Foundations and Developments. *Electron Markets*(15), 179-188. <https://doi.org/10.1007/s12525-015-0196-8>
- Guerrero, J. & Dias, F.T.P. (2024). Tourist tracking techniques and their role in destination management: a bibliometric study, 2007–2023. *Sustainability*, 16, 3708. <https://doi.org/10.3390/su16093708>
- Guerrero-Rodríguez, R., Stepchenkova, S. & Kirilenko, A. (2020). Experimental investigation of the impact of a destination promotional video with physiological and self-reported measures. *Tourism Management Perspectives*, 33, 100625. <https://doi.org/10.1016/j.tmp.2019.100625>

- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management*, 31(5), 637-651. <https://doi.org/10.1016/j.tourman.2009.07.003>
- Guttentag, D. A. & Smith, S. L. (2017). Assessing Airbnb as a disruptive innovation relative to hotels substitution and comparative performance expectations. *International Journal of Hospitality Management*, 64, 1-10. <https://doi.org/10.1016/j.ijhm.2017.02.003>
- Güngör, Ş. & Çetin, M. (2021). The role of Instagram use in the preferences of participation in event tourism: the case of the 7th International Orange Flower Carnival. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, 11(3), 1409-1423. <https://doi.org/10.30783/nevsosbilen.983555>
- Gürkan, A. S. & Ulema, Ş. (2020). Turizm talebinde snobizm'in etkisi: Nişantaşı'nda yaşayan Instagram kullanıcıları üzerine bir araştırma. *Türk Turizm Araştırmaları Dergisi*, 4(4), 3249-3262. <https://doi.org/10.26677/TR1010.2020.561>
- Gürsoy, Ö. (2024). The importance of artificial intelligence technology in tourism sector: Bing Copilot application. *Journal of Strategic Research in Social Science*, 10(3), 111-134. <https://doi.org/10.26579/josrss.10.3.2>
- Hadinejad, A., Moyle, B.D., Kralj, A. & Scott, N. (2019) Physiological and self-report methods to the measurement of emotion in tourism. *Tourism Recreation Research*, 44(4), 466-478. <https://doi.org/10.1080/02508281.2019.1604937>
- Hannak, A., Sapiezynski, P., Kakhki, A. M., Krishnamurthy, B., Lazer, D., Alan, M., & Wilson, C. (2013). Measuring personalization of web search. *WWW '13: Proceedings of the 22nd international conference on World Wide Web* (s. 527-538). Rio de Janeiro: Publication History. <https://doi.org/10.1145/2488388.2488435>
- Hannak, A., Soeller, G., Lazer, D., Mislove, A., & Wilson, C. (2014). Measuring Price Discrimination and Steering on E-commerce Web Sites. *IMC '14: Proceedings of the 2014 Conference on Internet Measurement Conference*, (s. 305-318). <https://doi.org/10.1145/2663716.2663744>
- Hardy, A. & Shoval, N. (2025). 25 years of tourist tracking: a geographical perspective. *Tourism Geographies*, 27, 3-4, 851-862. <https://doi.org/10.1080/14616688.2025.2462222>
- Hassan, T. & Saleh, M. I. (2024). Tourism digital detox and digital-free tourism: What do we know? What do we not know? Where should we be heading? *Journal of Tourism Futures*, Advance online publication. <https://doi.org/10.1108/JTF-12-2023-0274>
- Helbing, D., Frey, B. S., Gigerenzer, G., Hafen, E., Hagner, M., Hofstetter, Y., . . . Zwitter, A. (2018). Will Democracy Survive Big Data and Artificial Intelligence? D. Helbing içinde, *Towards Digital Enlightenment* (s. 73-98). Springer Nature link. https://doi.org/10.1007/978-3-319-90869-4_7
- Helsper, E. J. (2012). A Corresponding Fields Model for the Links Between Social and Digital Exclusion. *Communication Theory*, 22(4), 403-426. <https://doi.org/10.1111/j.1468-2885.2012.01416.x>

- Hoving, K. (2017). Digital Detox Tourism: Why Disconnect?: What are the Motives of Dutch Tourists to Undertake a Digital Detox Holiday? Sweden: Umea Universitet. <https://www.diva-portal.org/smash/get/diva2:1119076/FULLTEXT01.pdf>
- İbiş, S. (2025). Yapay zekâ teknolojilerinin gastronomi turizmde kullanımı: ChatGPT Örneği. *Güncel Turizm Araştırmaları Dergisi*, 9(1), 109-131. <https://dx.doi.org/10.32572/guntad.1518594>
- İmre, N. (2020). Turizm sektöründe sosyal medya kullanımı üzerine bir değerlendirme. *Türk Turizm Araştırmaları Dergisi*, 4(2), 1655-1670. <https://doi.org/10.26677/TR1010.2020.418>
- Kahraman, G., İncesu, A.C. & Küçükergin, F.N. (2024). Turizmde dijitalleşmenin olumlu-olumsuz etkileri üzerine bir değerlendirme. *Journal of Tourism and Gastronomy Studies*, 12(1), 735-754. <https://doi.org/10.21325/jotags.2024.1404>
- Kalvet, T., Olesk, M., Tiits, M. & Raun, J. (2020). Innvative tools fot tourism and cultural tourism impact assessment. *Sustainability*, 12, 7470. <http://dx.doi.org/10.3390/su12187470>
- Kang, J., Tang, L., & Fiore, A. M. (2014). Enhancing consumer–brand relationships on restaurant Facebook fan pages: Maximizing consumer benefits and increasing active participation. *International Journal of Hospitality Management*(36), 145-155. <https://doi.org/10.1016/j.ijhm.2013.08.015>
- Karabacak, K. (2024). Turizm sektöründe nöropazarlama yaklaşımı. *RIMAK International Journal of Humanities and Social Sciences*, 6(1), 375-394. <http://dx.doi.org/10.47832/2717-8293.27.21>
- Karabulut, A. (2023). George Orwell'in Bin Dokuz Yüz Seksen Dört Eserinde Ulusal ve Uluslararası Güvenlik Yaklaşımı Üzerine İnceleme. *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 13(3), 1369-1381. <https://doi.org/10.18074/ckuiibfd.1297136>
- Karaca, Ş. & Özkan Önem E. (2023). ChatGPT'nin turizm sektöründe kullanımına genel bakış. FAREAST 2nd International Conference on Social Sciences, October 20-22, Manila.
- Karagöz, B. (2022). Otel yöneticilerinin temassız teknolojilere, robotlaşmaya ve dijital detoksa bakış açılarının değerlendirilmesi: Konya örneği. Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Konya.
- Karaman, Ö. (2021). Yapay zekâ destekli kişiselleştirme algoritmalarının tüketici zihninde filtre balonu yaratma etkisinin incelenmesi. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 12(32), 1339-1351. <https://doi.org/10.21076/vizyoner.896059>
- Karapınar, E.S. (2024). Dijital pazarlama. İçinde Ş. Karaca (Ed), *Turizm ve Dijital Pazarlama* (Teori ve Uygulamalar) (ss. 35-84). Özgür Yayınları: Gaziantep.
- Kaya, Ş., Okul, T. & Şimşek, G. (2020). Açık veri ideolojisi ile turizm X.0 stratejilerinin değerlendirilmesi. *Journal of New Tourism Trends*, 1(1), 1-13. <https://dergipark.org.tr/tr/pub/joinntt/issue/64403/978615>

- Kayhan, B., Narin, B., Fırat, D. & Fırat, F. (2021). Algoritmalar, yapay zeka ve makine öğrenimi ekseninde gazetecilik etiği: uluslararası akademik dergilere yönelik bir inceleme. *TRT Akademi*, 6(12), 296-327. <https://doi.org/10.37679/trta.900086>
- Kızanlıklı, M.M. (2022). Turizmde dijital dönüşüm ve girişimcilik. İçinde E. Konaklıoğlu, B. Koç ve A.A. Yılmaz (Ed.) *Turizm Girişimciliğinin Doğası: Güncel Konular* (ss. 65). Nobel Yayıncılık: Ankara.
- Klein, M. (2020a). İşletmelerin dijital dönüşüm senaryoları – kavramsal bir model önerisi. *Elektronik Sosyal Bilimler Dergisi*, 19(74), 997- 1019. <https://doi.org/10.17755/esosder.676984>
- Klein, M. (2020b). İşletmelerde dijital dönüşüm ve etmenleri. *Journal of Business in the Digital Age*, 3(1), 24-35. <https://doi.org/10.46238/jobda.729499>
- Klopp, J., Delattre, F. & Chevre, A. (2019). Open Data for Inclusive Urban Public Transport Globally. French Development Agency.
- Klostermann, J., Flaswinkel, A. M., Hydock, C., & Decker, R. (2025). The Effect of Company Size on Aggregate Word-of-Mouth Valence. *Journal of Marketing*, 89(5), 130-151. <https://doi.org/10.1177/00222429251320603>
- Koç, N. E. & Koç, E. (2021). Pandemi dönemi'nde Türkiye'de dijital vatandaşlık olgusu. *The Turkish Online Journal of Design Art and Communication*, 11(3), 1019-1035. <https://doi.org/10.7456/11103100/016>
- Koçak, H. & Keskin, M. (2024). Risk toplumunda yaşlılık: Yaşlılıkta dijital teknoloji kullanımı ve dijital bölünme riski. *Etkileşim*, 14, 318-344. <https://doi.org/10.32739/etkilesim.2024.7.14.270>
- Koçyiğit, M. & Küçükçivil, B. (2022). Social media and cultural tourism. İçinde Handbook of Research on Digital Communications (ss. 363-384). Internet of Things, and the Future of Cultural Tourism. IGI Global. <http://dx.doi.org/10.4018/978-1-7998-8528-3.ch020>
- Koo, I., Zaman, U., Ha, H., & Nawaz, S. (2025). Assessing the interplay of trust dynamics, personalization, ethical AI practices, and tourist behavior in the adoption of AI-driven smart tourism technologies. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 1-10. <https://doi.org/10.1016/j.joitmc.2024.100455>
- Kostka, G. (2019). China's Social Credit Systems and Public Opinion: Explaining High Levels of Approval. *New Media & Society*, 21(7), 1565-1593. <https://doi.org/10.1177/1461444819826402>
- Kovács, Z., Vida, G., Elekes, Á. & Kovalcsik, T. (2021). Combining social media and mobile positioning data in the analysis of tourist flows: a case study from Szeged, Hungary. *Sustainability*, 13, 2926. <https://doi.org/10.3390/su13052926>
- Köken, G., Özdemir, C., Birkan, N. & Mercin, L., (2025). Müzelerde Dijital Dönüşümün İncelenmesi. *D-Sanat*, 1(9), 13-39. <https://doi.org/10.5281/zenodo.15031029>
- Kunt, S. (2024). Dijital yerliler: seyahat bloggerları üzerine bir inceleme. *Turizm Akademik Dergisi*, 11(2), 299-315. <https://dergipark.org.tr/tr/pub/touraj/issue/89011/1530076>

- Kuru, D. & Akdoğan, M. Ş. (2022). Sanal seyahat deneyimindeki duyu ve bilgi kalitesinin ziyaret niyeti üzerine etkileri. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 19("21. Uluslararası İşletmecilik Kongresi" Özel Sayısı), 137-153. <https://doi.org/10.33437/ksusbd.1133724>
- Kuss, D. J., & Griffiths, M. D. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International Journal of Environmental Research and Public Health*, 14(3), 1-17. <https://doi.org/10.3390/ijerph14030311>
- Kuşcu, F. N. & Göde, A. (2024). Dijital çağın sebep olduğu duygu ve davranış bozuklukları. *ASSAM Uluslararası Hakemli Dergi*, (25), 30-44. <https://doi.org/10.58724/assam.1489942>
- Lei, M., Chen, W., Wu, J., Zhang, Y. & Lv, Y. (2022). Neurophysiological measures in hospitality and tourism: review, critique, and research agenda. *Journal of Hospitality Tourism Research*, 48(1), 3-31. <https://doi.org/10.1177/10963480221091117>
- Leoni, V. & Boto-Garcia, D. (2023) Apparent and actual hotel scores under Booking.com new reviewing system. *International Journal of Hospitality Manage*, 111:103493. <https://doi.org/10.1016/j.ijhm.2023.103493>
- Li, S., Lyu, T., Chen, M. & Zhang, P. (2021). The prospects of using EEG in tourism and hospitality research. *Journal of Hospitality & Tourism Research*, XX(X). <https://doi.org/10.1177/1096348021996439>
- Luca, M. (2016). *Reviews, Reputation, and Revenue: The Case of Yelp.com*. Harvard Business School Working Paper 12-016.
- Luca, M., & Zervas, G. (2015). Fake It Till You Make It: Reputation, Competition, and Yelp Review Fraud. *Harvard Business School NOM Unit Working*, 14-006, 1-35. <https://doi.org/10.2139/ssrn.2293164>
- Lučić, S. (2023). Protection of personal data in the tourism sector. *Menadžment u Hotelijerstvu i Turizmu*, 11(1), 193–206. <https://doi.org/10.5937/menhotur23011931>
- Lyon, D. (2018). *The Culture of Surveillance: Watching as a Way of Life*. Polity Press.
- Meydan, C.H. (2023). Havayolu işletmelerinde dijital dönüşüm uygulamaları üzerine bir inceleme. *Journal of Aviation Research*, 5(1), 65–82. <https://doi.org/10.51785/jar.1185935>
- Milano, R., Baggio, R. & Piattelli, R. (2011). The effects of online social media on tourism websites. 18th International Conference on Information Technology and Travel & Tourism, 26-28 January 2011, Innsbruck, Austria.
- Mirza, T., Tuli, N. & Mantri, A. (2022). Virtual reality, augmented reality, and mixed reality applications: Present scenario. In 2022 2nd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) (pp. 1405-1412). IEEE.
- Mkwizu, K. H. (2023). Mixed reality and resilience in tourism. *International Journal of Advanced Virtual Reality*, 1(1), 1-7.
- Morozov, E. (2011). The Net Delusion: The Dark Side of Internet Freedom. *Perspectives on Politics*, 895-897. <https://doi.org/10.1017/S1537592711004014>

- Muğan Ertuğrul, S., Kuran, İ. & Tekeli, H.N. (2022). Dijitalleşmenin turizm sektörüne yansımaları ve bölgesel kalkınmaya etkisi. *Uluslararası Türk Dünyası Turizm Araştırmaları Dergisi*, 7(2), 14- 25. <https://doi.org/10.37847/tdtad.1192165>
- Naughton, J. (2019). *The Guardian*. 09 01, 2025 tarihinde The goal is to automate us: welcome to the age of surveillance capitalism: <https://www.theguardian.com/technology/2019/jan/20/shoshana-zuboff-age-of-surveillance-capitalism-google-facebook> adresinden alındı
- OECD. (2019). *How's Life in the Digital Age? Opportunities and Risks of the Digital Transformation for People's Well-being*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264311800-en>
- Oğurtanı, K. (2022). *Online Görünürlük Nedir?* Erişim Adresi: www.tio.ist/tr/: <https://tio.ist/tr/perakende-yonetimi/kucuk-isletmeler-icin-dijital-gorunurluk-uzaydan-gorunmek-icin-atabileceginiz-6-ucretsiz-adim/> Erişim Tarihi: 30.08.2025
- Okatan, D. & Yıldırım, Y. (2021). Endüstri 4.0 teknolojilerinin turizm sektörüne yansımaları: literatür incelemesi. *Journal of Tourism and Intelligence and Smartness*, 4(2), 168-185. <https://dergipark.org.tr/tr/pub/jtis/issue/63047/972936>
- Olgaç, S. & Yılmaz, V. (2020). Sosyal medya kullanımının tatil yeri seçimine etkisi: Bir yapısal model önerisi. *Journal of Tourism Theory and Research*, 6(2), 103-114. <https://doi.org/10.24288/jtr.690848>
- Omol, E. J. (2023). Organizational digital transformation: from evolution to future trends. *Digital Transformation and Society*, 3(3), 240-256. <https://doi.org/10.1108/DTS-08-2023-0061>
- Orwell, G. (2016). *George Orwell* (73 b.). (C. Üster, Çev.) Can Yayınları.
- Öngören, H. (2022). Türkiye'de internet kullanım eğilimi ve dijital vatandaşlık algısının insan hakları bağlamında incelenmesi. *Türkiye İnsan Hakları Ve Eşitlik Kurumu Akademik Dergisi*, 5(9), 47-82. <https://dergipark.org.tr/tr/pub/tihek/issue/72572/1117445>
- Özaksoy, B. (2023). *Post truth bağlamında kişiselleştirme algoritmaları üzerine bir araştırma: sosyal medyada etkileşim yoluyla keşif*. Yüksek Lisans Tezi, Marmara Üniversitesi, İstanbul.
- Özkuk, Ö. (2024). Fizikselden dijital: dijital pazarlamanın temelleri. İçinde M. F. Tuna (Ed), *Dijital Pazarlama Yönetimi* (ss. 1-29). Özgür Yayınları: Gaziantep.
- Özmen, E. (2022). Sosyal bilim çalışmalarında biyolojik geri bildirim yöntemlerinin kullanımı. *Anadolu Üniversitesi, Sosyal Bilimler Dergisi*, 22(2), 251-272. <https://doi.org/10.18037/ausbd.1227353>
- Öztürk, M. (2021). Dijital vatandaşlık araştırmalarının incelenmesi: kavramsal ve yöntemsel eğilimler. *Yükseköğretim ve Bilim Dergisi*, 11(2), 385-393. <https://dergipark.org.tr/tr/pub/higheredusci/issue/64749/905268>
- Padron-Avila, H. & Hernandez-Martín, R. (2020). How can researchers track tourists? A bibliometric content analysis of tourist tracking techniques. *European Journal of Tourism Research*, 26, 2601.

- Pariser, E. (2011). *The Filter Bubble: What The Internet Is Hiding From You*. Penguin Books.
- Pérez-Torres, V. (2024). Social media: a digital social mirror for identity development during adolescence. *Current Psychology*, 43, 22170-22180. <https://doi.org/10.1007/s12144-024-05980-z>
- Pesonen, J. & Lampi, M. (2016). Utilizing open data in tourism. In Proceedings of the ENTER 2016 Conference on Information and Communication Technologies in Tourism, Bilbao, Spain, 2–5 February. http://agrilife.org/ertr/files/2016/01/ENTER2016_submission_122.pdf
- Qiang, X. (2019). The Road to Digital Unfreedom: President Xi's Surveillance State. *Journal of Democracy*, 30(1), 53-67. <https://doi.org/10.1353/jod.2019.0004>
- Ribble, M., Bailey, G. & Ross, T. W. (2004). Digital citizenship: addressing appropriate technology behavior. *Learning & Leading with Technology*, 32(1), 6-12.
- Rieh, S. Y. (2002). Judgment of information quality and cognitive authority in the Web. *Journal of the American Society for Information Science and Technology*, 53(2), 145-161. <https://doi.org/10.1002/asi.10017>
- Rodrigues, N. (2016). Algorithmic Governmentality, Smart Cities and Spatial Justice. *Justice Spatiale*(10), 1-22. https://shs.hal.science/halshs-01507099v1/adresinden_alindi
- Ross, J. & Gao, J. (2015). Overcoming the language barrier in mobile user interface design – A case study on a mobile health app. Australasian Conference on Information Systems, University of South Australia, Adelaide. <https://doi.org/10.48550/arXiv.1605.04693>
- Rouvroy, A., & Berns, T. (2013). Algorithmic Governmentality and Prospects of Emancipation. *Réseaux*, 177(1), 163-196. <https://doi.org/10.3917/res.177.0163>
- Rugai, J. & Hamilton-Ekeke J.T. (2016). A review of digital addiction: a call for safety education. *Journal of Education and e-Learning Research*, 3(1), 17-22. <https://doi.org/10.20448/journal.509/2016.3.1/509.1.17.22>
- Sağlam, M. (2020). İşletmelerde geleceğin vizyonu olarak dijital dönüşümün gerçekleştirilmesi ve dijital dönüşüm ölçeğinin Türkçe uyarlaması. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, 20(40), 395-420. <https://doi.org/10.46928/iticusbe.764373>
- Sanders, C.K. & Scanlon, E. (2021). The digital divide is a human rights issue: Advancing social inclusion through social work advocacy. *Journal of Human Rights and Social Work*, 6, 130-143. <https://doi.org/10.1007/s41134-020-00147-9>
- Sandua, D. (2024). Digital minimalism: How to disconnect for a better life. The Author.
- Sargin, S. (2025). Dijital minimalizm: Tüketici eğilimleri ve işletmeler için yeni pazarlama perspektifleri. *BMIJ*, 3(2), 879-893. <https://doi.org/10.15295/bmij.v13i2.2520>
- Savaş, R.N., Zaim, A.H. & Aydın, M.A. (2020). KVKK ve GDPR kapsamında firmaların mevcut durum analizi üzerine bir inceleme. *İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi*, 19(38), 208-223. <https://dergipark.org.tr/tr/pub/ticaretibd/issue/58122/847247>

- Schlumberger, O., Edel, M., Maati, A., & Saglam, K. (2024). How Authoritarianism Transforms: A Framework for the Study of Digital Dictatorship. *Government and Opposition*(59), 761-783. <https://doi.org/10.1017/gov.2023.20>
- Schmücker, D. & Reif, J. (2022). Measuring tourism with big data? Empirical insights from comparing passive GPS data and passive mobile data. *Annals of Tourism Research Empirical Insights*, 3, 100061. <https://doi.org/10.1016/j.annale.2022.100061>
- Sezgin, M. & Karagöz, B. (2021). Turizmde robotlaşma teknolojisinin kullanımı. *Uluslararası Anadolu Sosyal Bilimler Dergisi*, 5(3), 946-959. <https://doi.org/10.47525/ulasbid.940930>
- Sezgin, M. & Karagöz, B.S. (2023). Turistik destinasyon tanıtımında sosyal medyanın rolü: Göbeklitepe örneği. *Alanya Akademik Bakış*, 7(3), 1161-1176. <https://doi.org/10.29023/alanyaakademik.1229229>
- Sezgin, M., Keleş, A. & Karagöz, B. (2021). Pandemi dönemi temassız otelcilik ve 4-5 yıldızlı oteller üzerine bir araştırma. *Journal of Global Tourism and Technology Research*, 2(2), 72-86. <https://dergipark.org.tr/tr/pub/jgttr/issue/65288/956509>
- Skivko, M., Korneeva, E., & Kolmykova, M., (2019). Digital minimalism as a leading limitation of media communications in the heyday of digital culture. In *Proceedings of the 6th International Conference on Social, Economic, and Academic Leadership (ICSEAL-6-2019)* (ss. 61-67).
- Skubis, I., Mesjasz-Lech, A. & Nowakowska-Grunt, J. (2024). Humanoid robots in tourism and hospitality-exploring managerial, ethical, and societal challenges. *Appl. Sci.*, 14, 11823. <https://doi.org/10.3390/app142411823>
- Soydan, M. C. & Rodoplu, H. 2024. Dijital varlıklar çağına seyahat: Blockchain teknolojisiyle uçak biletleri. *International Journal of Aeronautics and Astronautics*, 5(2), 37-50. <https://doi.org/10.55212/ijaa.1494511>
- Stylidis, D. (2020). Residents' Destination Image: A Perspective Article. *Tourism Review*, 75(1), 228-231. <https://doi.org/10.1108/TR-05-2019-0191>
- Sü Eröz, S. (2025). Chatbotlar: gelişimi, sınıflandırılması ve konaklama işletmelerinde kullanımı üzerine bir inceleme. *Journal of Tourism and Gastronomy Studies*, 13(1), 980-1004. <https://doi.org/10.21325/jotags.2025.1591>
- Sümer, M.D. (2023). “Dijital kafes”: Beyaz yakalı çalışanlar örneğinde gündelik hayatın dijitalleşmesi. Doktora Tezi, Ankara Üniversitesi, Ankara.
- Şahin, N. N., Açiksözlü, Ö. & Varol, İ. (2025). Görsel sosyal medya içerikleri üzerinden turistik imajın incelenmesi: Armutlu örneği. *Journal of Academic Tourism Studies*, 6(1), 1-12. <http://dx.doi.org/10.29228/jatos.80437>
- Şenerol, H. (2022). Havacılık sektöründe blockchain uygulamaları. İçinde O. Yılmaz, B.T. Kaplan ve M. Kaplan (Ed), *Blockchain Teknolojileri ve Sektörel Etkileri* (ss.43-60). Nobel Yayıncılık: Ankara.
- Şimşek, Ş.E. (2024). *Seyahat temalı mobil uygulamaların kullanıcıların seyahat sürecindeki kararlarına etkisi ve kullanıcı beklentileri*. Yüksek Lisans Tezi, Sakarya Üniversitesi, Sakarya.

- Tayanç, M. (2021). Çağın gerisinde yaşayanlar: Göç, kent ve dijital eşitsizlik. *Vankulu Sosyal Araştırmalar Dergisi*, 8, 133-154. <https://dergipark.org.tr/tr/pub/yyuvasad/issue/67701/1024508>
- Timur, B. & Köz, E. N. (2022). Turizmde sanal gerçeklik ve artırılmış gerçeklik çalışmaları üzerine sistematik bir literatür taraması. *Turizm Akademik Dergisi*, 9(1), 233-251. <https://dergipark.org.tr/tr/pub/touraj/issue/70329/999993>
- Topsakal, Y. & Dinç, A. (2022). Çevrimdışı tatil: dijital detoks için ekoturizm. *Journal of Tourism Intelligence and Smartness*, 5(1), 1-10. <https://dergipark.org.tr/tr/pub/jtis/issue/68431/1057044>
- Turkle, S. (2011). *Alone Together: Why we expect more from technology and less from each other*. Basic Books/Hachette Book Group.
- Türel, N.Ş., Davras, G.M. & Dolmacı, N. (2015). Turizm sektöründe kişisel bilgilerin mahremiyeti. *International Journal of Human Sciences*, 12(1), 236-254.
- Uluçay, D. M. & Kobak, K. (2020). Dijital detoks: teknoloji bağımlılığına karşı yeni bir eğilim ve genç yetişkinler özelinde bir değerlendirme. *Ankara Üniversitesi İletişim Dergisi*, 7(2), 325-350. <https://doi.org/10.24955/ilef.827235>
- URL-1. Ufuk Tarhan. Endüstri 4.0 ve Endüstri 5.0 arasındaki fark nedir? Erişim adresi: <https://ufuktarhan.com/makale/endustri-40-ve-endustri-50-arasindaki-fark-nedir>. Erişim tarihi: 22.07.2025
- URL-10. ITU, 2024 Gerçekler ve Rakamlar. Erişim adresi: <https://www.itu.int/itu-d/reports/statistics/2024/11/10/ff24-internet-use-in-urban-and-rural-areas/>. Erişim tarihi: 11.08.2025
- URL-2. Eater, Futuristic Dubai Restaurant Uses Touchscreen Tables and 'Chef Cams'. Erişim adresi: <https://www.eater.com/2014/2/18/6277805/futuristic-dubai-restaurant-uses-touchscreen-tables-and-chef-cams>. Erişim tarihi: 22.07.2025
- URL-3. Henn na Hotel, A Hotel that Promises to Change. Erişim adresi: <https://tokyo-hamamatsucho.hennnahotel.com/a-hotel-that-promises-to-change/>. Erişim tarihi: 22.07.2025
- URL-4. Seven Boats, How AR VR technology can help transform Travel and Tourism industry. Erişim adresi: <https://www.7boats.com/ar-vr-travel-tourism/>. Erişim tarihi: 24.07.2025
- URL-5. We are social, Digital 2025 July Global Statshot Report. Erişim adresi: <https://wearesocial.com/us/blog/2025/07/digital-2025-july-global-statshot-report/>. Erişim tarihi: 11.08.2025
- URL-6. TÜİK, Hanehalkı Bilişim Teknolojileri Kullanım Araştırması, 2024. Erişim adresi: [https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-\(BT\)-Kullanim-Arastirmasi-2024-53492](https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2024-53492). Erişim tarihi: 08.08.2025.
- URL-7. Polaris Market Research, Digital Detox Tourism Services Market Growth, Trends, Forecast, 2025-2034. Erişim adresi: <https://www.polarismarketresearch.com/industry-analysis/digital-detox-tourism-services-market>. Erişim tarihi: 13.08.2025

- URL-8. Statista, Number of internet users worldwide from 2005 to 2024. Erişim adresi: <https://www.statista.com/statistics/273018/number-of-internet-users-worldwide/>. Erişim tarihi: 13.08.2025
- URL-9. SG Analytics, Dominating the Internet Landscape: Global Internet Usage Statistics by Country in 2025. Erişim adresi: <https://www.sganalytics.com/blog/global-internet-usage-statistics/>. Erişim tarihi: 13.08.2025
- Ülkü, A. & Lobut, N. (2025). GeoAI destekli turizm: çıkarımlar. *Uluslararası Disiplinlerarası Mükemmellik Arayışı Dergisi (UDMAD)*, 5 (1), 58-77.
- Ünal, A. (2020). Instagram içeriklerinin yabancı turistlerin destinasyon seçimleriyle ilgili anlık algı değişimlerine etkisinin belirlenmesi. *Turizm Akademik Dergisi*, 7(1), 1-14. <https://dergipark.org.tr/tr/pub/touraj/issue/54951/680437>
- Ünal, A. & İpar, M. S. (2021). Turistlerin destinasyon tercihlerinde sosyal medyanın etkisinin belirlenmesine yönelik bir araştırma: sakın şehir destinasyonu vize örneği. *International Journal of Eurasia Social Sciences (IJOESS)*, 12(45), 510-527. <http://dx.doi.org/10.35826/ijoess.2983>
- Vargün, Ö. (2022). Teknolojinin belirleyiciliğinde müzelerde dijitalleşme süreci ve insan odaklı tasarım yaklaşımları. *Idil*, 92, 565-584. <https://doi.org/10.7816/idil-11-92-09>
- Villa, E., Quaresmini, C., Breschi, V., Schiaffonati, V., & Tanelli, M. (2025). The epistemic dimension of algorithmic fairness: assessing its impact in innovation diffusion and fair policy making. *Computers and Society*(1), 1-16. doi:10.48550/arXiv.2504.02856
- Vural, Y. (2018). Veri mahremiyeti: saldırılar, korunma ve yeni bir çözüm önerisi. *UBGMD*, 4(2), 21-34. <https://doi.org/10.18640/ubgmd.517767>
- Warschauer, M. (2003). *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press. <https://doi.org/10.7551/mitpress/6699.001.0001>
- Weinstein, A., & Lejoyeux, M. (2010). Internet Addiction or Excessive Internet Use. *The American Journal of Drug and Alcohol Abuse*, 36, 277-283. <https://doi.org/10.3109/00952990.2010.491880>
- Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 58, 51-65. <https://doi.org/10.1016/j.tourman.2016.10.001>
- Yalçinkaya, B. & Cıbaroğlu, M. O. (2019). Dijital vatandaşlık algısının incelenmesi: Ampirik bir değerlendirme. *BMIJ*, 7(4), 1188-1208. <http://dx.doi.org/10.15295/bmij.v7i4.1140>
- Yaman, İ. (2015). Digital divide within the context of language and foreign language teaching. *Procedia - Social and Behavioral Sciences* 176, 766-771. <https://doi.org/10.1016/j.sbspro.2015.01.538>
- Yaşarsoy, E. (2024). Artırılmış gerçeklik pazarlaması: Turizm sektörü. İçinde A. Ünal, E. Çilesiz ve O. Çelen (Ed), *Turizm ve Destinasyon Araştırmaları IX* (ss. 311-326). Pa Paradigma Akademi: Çanakkale.

- Yıldırım, İ. (2021). Sosyal medya, dijital bağımlılık ve siber zorbalık ekseninde değişen aile ilişkileri üzerine bir değerlendirme. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 9(5), 1237-1258. <https://doi.org/10.18506/anemon.892144>
- Yıldız, N., Yazıcı Ayyıldız, A. & Tavukçuoğlu, T. (2022). Müzelerde dijitalleşme sürecine ilişkin sanal müzelerin incelenmesi. *Turist Rehberliği Dergisi*, 5(2), 117-141. <https://doi.org/10.34090/tured.1184787>
- Yıldız, S. (2023). Blockchain teknolojisi: turizm endüstrisinde güvenlik ve veri yönetimi için potansiyelleri. İçinde *Turizmde Dijital Gelecek* (ss. 322-335). Ankara: Detay Yayıncılık.
- Yılmaz, A. (2022). *Reklamcılık sektörünün geleceğinde yapay zekanın rolü*. Yüksek Lisans Tezi, İstanbul Kültür Üniversitesi, İstanbul.
- Yılmaz, M. & Karamustafa, K. (2022). Artırılmış gerçeklik uygulamaları ve turizm. *Seyahat ve Otel İşletmeciliği Dergisi*, 19(3), 399-422. <https://doi.org/10.24010/soid.1077349>
- Yücel, N. (2025). Nöropazarlama ve tüketici davranışı: bilişsel ve duygusal dinamiklerin analizi. İçinde Tuncer, B. (Ed), *Pazarlama 5.0: İnsan ve Teknolojinin Stratejik İşbirliği* (ss. 91- 122). Özgür Yayınları: Gaziantep. <https://doi.org/10.58830/ozgur.pub775>
- Zaman, M. (2025). Transforming Travellers' Experience with AI: A New Era of Innovation. J. D. Santos, B. B. Sousa, & P. B. Pires içinde, *Leveraging Digital Marketing for Tourism Exploring Strategies and Applications in Contemporary Tourism Markets* (s. 169-183). Springer.
- Zengin, B. & Kazdal, E. (2020), Konaklama sektöründe dijitalleşme üzerine kavramsal bir inceleme. İçinde C. Bilgi, M. C. Şapıcılar, S. Uslu ve Z. Yetiş (Ed), *Turizme Akademik Yaklaşımlar* (ss.1-13). Konya Büyükşehir Belediyesi Kültür Yayınları: 420: Konya.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs

ABOUT THE AUTHORS

Erkan AKGOZ

He graduated from Erciyes University, School of Tourism and Hotel Management in Nevşehir 1996. He started his academic life at Selcuk University in 1997. He completed master's and doctorate education at Selcuk University Social Sciences Institute. He had officiated as Asst. Assoc. Dr. at Beysehir Ali Akkanat Tourism Faculty between 2010 and 2017. Akgöz, who was awarded the title of Associate Professor in 2019 and Professor in 2024, worked as a faculty member at Kyrgyz-Turkish Manas University between 2017 and 2020. He has many books and articles on topics of tourism, gastronomy and reputation management. He participated in many national and international congresses and conferences. He works at Selcuk University, Faculty of Tourism, Department of Tourism Management.

Erkan AKGÖZ

Erciyes Üniversitesi Nevşehir Turizm İşletmeciliği ve Otelcilik Yüksekokulundan 1996 yılında mezun oldu. Akademik hayata 1997 yılında Selçuk Üniversitesinde. Yüksek lisans ve Doktora eğitimini de Selçuk Üniversitesi Sosyal Bilimler Enstitüsünde tamamladı. 2019 yılında Doçent, 2024 yılında da Profesör unvanı almaya hak kazanan Akgöz, 2017-2020 tarihleri arasında Kırgızistan-Türkiye Manas Üniversitesinde öğretim üyesi olarak çalıştı. Turizm, gastronomi, itibar yönetimi gibi konularda birçok kitap ve makale yayınladı. Birçok ulusal ve uluslararası kongre ve konferanslara katıldı. Selçuk Üniversitesi Turizm Fakültesi, Turizm İşletmeciliği bölümünde görev yapmaktadır.



Bengu Su KARAGOZ

She graduated from Selçuk University, Faculty of Tourism Management, in 2020. In 2022, she completed her master's degree at Selçuk University, Institute of Social Sciences, and began her doctoral studies. As of 2025, Karagöz works as a lecturer at Alanya University and has published books and articles on topics such as tourism, gastronomy, and digitalization.

Bengü Su KARAGÖZ

Selçuk Üniversitesi Turizm İşletmeciliği Fakültesinden 2020 yılında mezun oldu. 2022 yılında Selçuk Üniversitesi Sosyal Bilimler Enstitüsünde Yüksek Lisans eğitimini tamamladı ve doktora eğitimine başladı. 2025 yılında Alanya Üniversitesinde öğretim görevlisi olarak çalışmakta olan Karagöz, turizm, gastronomi ve dijitalleşme gibi konularda kitap ve makaleler yayınladı.



ISBN: 978-975-448-253-9



9 789754 482539

Prof. Dr. Erkan AKGOZ - Lect. Bengu Su KARAGOZ

DIGITAL DICTATORSHIP IN TOURISM

(Algorithms, Surveillance and
Behavioral Engineering)

DIGITAL DICTATORSHIP IN TOURISM

Prof. Dr. Erkan AKGOZ
Lecturer Bengu Su KARAGOZ



2025



ISBN: 978-975-448-253-9



9 789754 482539