

PECULIARITIES OF CONSUMER BEHAVIOR IN THE CONTEXT OF SMART TOURISM

dr. Kristina Grumadaitė

St. Ignatius of Loyola College, Kaunas, Lithuania

dr. Sonny Jose

*Professor & Director-International Relations, Loyola College of Social Sciences,
Thiruvananthapuram, India*

Abstract

This paper goes beyond the widely applied concept of smartness, reflecting the application and use of modern digital technologies, and thus defines smart tourism through the dimensions of intelligence, innovativeness, being based on networks and knowledge, learning and agility, sustainability and digitality. Following these dimensions, consumer behavior in using tourism services is analyzed. This analysis reveals the challenges to maintain the coherence between providing and using touristic services, in order to employ two-sided smartness.

Key words: smart tourism, smart tourism dimensions, consumer behavior.

Introduction

Contemporary tourism has experienced and keeps experiencing many challenges. Tourism in general is very sensitive to the phenomena that are happening in the world, pandemics, such as COVID-19 pandemics, wars, sanctions, climate changes, decreasing biodiversity and other challenges. Because of the intensity of these changes, scientific literature emphasizes the importance of research on deeper analysis of resilience and adaptation of tourism sector in order to face those challenges (Rastegar, Higgins-Desbiolles & Ruhanen, 2023) and at the same time, to meet the current consumption behaviors in tourism sphere (Han, 2021). Thus, it asks for *a complex approach* in order to reveal the peculiarities of consumer behavior in the contemporary tourism sector.

However, in order to receive the best result, both consumers and service providers should act in harmony. It is quite a challenging task to achieve because the expectations and behavior may differ causing various contradictions. In addition, the scientists mostly analyze a particular aspect of consumer behavior, for example, digitality or sustainability, but doesn't present the overall phenomenon of consumer behavior while buying, purchasing and consuming tourism and travel-related services, which include "services provided by hotels and restaurants (including catering), travel agencies and tour operator services, tourist guide services and other related services" (World Trade Organization).

Thus, **the aim of the paper** is to reveal the complexity of the phenomenon of tourism by revealing the peculiarities of tourist behavior while acquiring tourism services.

The tasks are as follows:

- to reveal and analyze the dimensions of smart tourism;
- to reveal the complexity of tourist behavior based on smart tourism dimensions.

Research methods: scientific literature analysis.

Towards the complex approach to tourism: the concept of smartness

Much emphasis in the scientific literature regarding consumer behavior in tourism sector is given to the concept of *smartness*, which is mostly related to digitalization (Botezat et al., 2024; Sustacha et al., 2023) that means application of information and communication technology (ICT), mobile communication, cloud computing, artificial intelligence, virtual reality and other innovative digital tools in order to improve tourism services (Rodrigues et al., 2020).

However, following the definitions of “smart” in the dictionaries (for example, The American Heritage Dictionary of the English Language or The Free Dictionary), it could be noted that to be smart could be defined as “having or showing intelligence; bright”, “amusingly clever”; “witty”. As it can be seen, in such definitions, smartness is related to general competence not getting limited to the ability to use digital technologies.

Accordingly, approximately 10 years ago some approaches started to emerge, which emphasized that a smart social system is much more than a digital system. For example, Jucevičienė & Jucevičius (2014) stated that smart social system is such system, when people are ready for their interaction in the environment of their social system but according to the need (especially – to get information and other resources) and are open to other environments as well. In addition, such systems “are able to envisage the features critical for their environment or their system, to which they quickly and inventively react by adjusting to this environment with adequate decisions as well as using it to attain the goals of their system” (p. 916).

The fellow authors of this approach defined the following dimensions of smartness –intelligence, innovativeness, being based on networks and knowledge driven, learning, agility, sustainability and finally – digitality (see Figure 1).

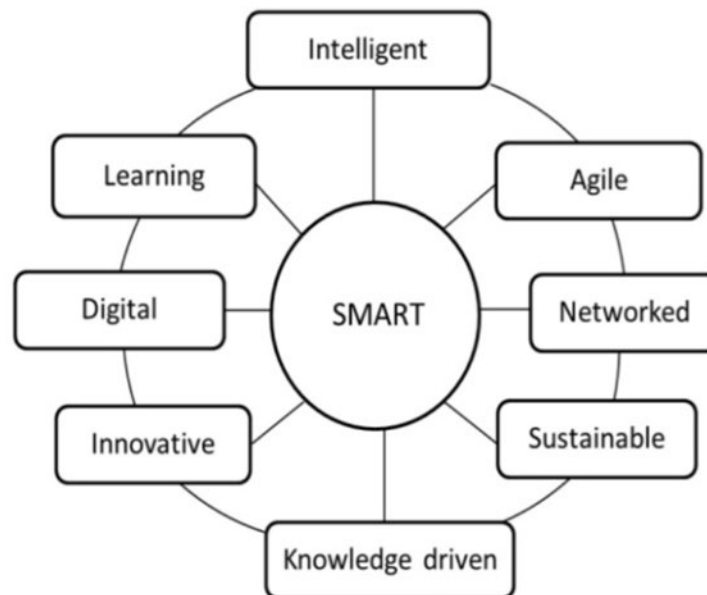


Figure 1. The dimensions of smartness (Jucevicius & Liugailaite-Radvickiene, 2013).

These dimensions could be explained as follows:

- **Intelligence** means an ability to understand and manage signals that come from the environment. For example, that could be a growing interest in ecology or seeing the first signals of adaptation of artificial intelligence.
- **Innovativeness** – an ability to create new products, which can be adapted commercially (for example, to improve tourism services that fit the concept of sustainability). According to Liu, Hall, Zhu & Ting Pong Cheng (2024), innovation is compulsory for the competitiveness of smart cities and tourist destinations -for example, if a museum is lacking new innovative solutions and technologies, it may lose the visitors over time.
- **Network based (networked)** – it means that various actors and resources (financial, intellectual, physical, etc.) are connected in order to receive the best result. Depending on the type of the service, the network participants may include main tourism service providers, facilitators/intermediary firms, travel agencies, tourists, e-infrastructure/digital marketing providers, technology providers, hotels/accommodation, insurance companies, visa providers, translation providers, transfer/transportation providers, other profit and non-profit organizations (Karadayi-Usta, S., 2024). Both scientists and business practitioners even emphasize the importance of creating and developing industrial clusters – “geographic concentrations of interconnected companies and institutions in a particular field” (Porter, 1998). Such concentrations, which operate as naturally emerging interconnected networks, contribute to the competitiveness of countries and regions, and allow to provide the best quality tourism services timely. The cooperation is most necessary during the times of an intensive touristic season when the flows of tourists should be directed to different service providers or more joint efforts of different service providers are needed to create a particular service (Grumadaitė, 2020).
- **Digitality** – an ability to use Information-communication technologies.
- **Sustainability** – financial, social and environmental performance of tourism and hospitality in general providers (Higgins-Desbiolles & Wijesinghe, 2019) in order to maintain economic efficiency, social equity and ecological consideration (Wineland, Rezapour & Neeson, 2023). Rastegar, Higgins-Desbiolles & Ruhanen (2023) emphasized the necessity to overcome the tensions in meeting human needs while also tending to ecological needs and the needs of the more-than-human in our shared spaces, including spaces of tourism.
- **Agility** – an ability not only to survive but also thrive in an always changing environment. Junfeng & Butkouskaya (2024) state that customer agility, or the ability of the companies to sense and respond to customer needs, positively influences the sustainability performance of tourism organizations economically, socially and environmentally.
- **Knowledge driven** – implementing knowledge management is the key source for successful actions and continuous development.
- **Learning** – an ability to acquire knowledge continuously. Taking into account the development of digital technologies, sustainability ideas, innovation trends, fluctuations of the external environment with minor and major events, affecting the tourism sector.

Nowadays, more authors emphasize the complexity of the concept of smartness. For example, Liu, Hall, Zhu & Ting Pong Cheng (2024) defined five factors affecting the concept of smart tourism defining smart tourism as “a tourism experience that involves technology, innovation, sustainability, accessibility, and is tourist-centered” (p. 566). In other words, all efforts of tourism service providers should be directed to the needs of the tourists “from a technology-centered approach to a human-centered view” (Hsu, 2023). According to Liu et al. (2024) accessibility could be understood as a digital accessibility (websites, applications, social media, etc.) and physical accessibility (transport, location, architecture, infrastructure, resources, tourism information, etc.).

Ödemiş (2022) emphasizes smart tourism as an interdisciplinary field, which requires the integration of many factors, including high-level physical and information technology, infrastructure services, well-trained human resources, effective management, leadership spirit, effective promotion and marketing practices, cooperation between stakeholders and environmental awareness. It also means that smart tourism is also not about informational technology but also about networking, effective employment of human and other resources.

However, taking into account the tourism complexity, which this paper emphasizes as well, the behavior of tourism consumers is very complex too. The peculiarities of the behavior of tourists through the lenses of smart tourism are analyzed in the next part of this paper.

Consumer behavior in tourism sector through the lenses of smart tourism

In general, tourism consumer behavior should reflect the same dimensions - intelligence, innovativeness, being based on networks and knowledge driven, learning, agility, sustainability and digitality.

Consumer behavior and digitalization /innovation. Although the tourism service providers invest a lot in digital technologies, not all tourists are eager and prepared to use these technologies. For example, Weaver & Moyle (2019) defined four types of tourists who willfully or inadvertently avoid digitality:

- *Abstention (a willful-passive dimension)* encompasses actions that are willfully unperformed: for example, the tourists avoid all the places that use digital technologies and /or they refuse to use the digital technologies.
- *Sabotage (willful-active dimension)* includes actions that are purposely performed to the known or hoped-for detriment of a particular service or service provider, for example, providing negative reviews digitally, even if the restaurant is good.
- *Non-use error (inadvertent-passive dimension)* occurs when the tourist mistakenly fails to take an expected action, such as forgetting to recharge their smartphone during the night or losing this device during a flight.
- *Misuse error (inadvertent-active dimension)* pertains when tourists mistakenly take actions resulting from misinterpretation or misapplication of clear instructions. Examples include pressing an ‘off’ button when ‘on’ was intended, following Siri (a mobile app) directions incorrectly while driving, or entering an incorrect restaurant name when providing a TripAdvisor review.

The challenges in using digital technologies are expressed by older generations and / or by people who have less quality technological equipment or no equipment to employ

the digital solutions by the providers of tourism services (Tuomi, Moreira Kares & Zainal Abidin, 2023). Following the empirical research results, the authors emphasized the importance of the accessibility of digital tourism services, ease of use (for example, registration, payments, navigation of the actual user interfaces, etc.) and usefulness (bringing added value to users' vis-à-vis existing experiences).

Knowledge driven consumer behavior. The previously presented types of consumer behavior reveal the importance of knowledge in making decisions because the use of modern digital technologies while choosing, buying and consuming tourism services may cause some negative outcomes. Another example of the contemporary application of digital technologies should be the application of Artificial Intelligence (AI) software technologies. However, AI could be related to so-called *AI hallucination*. This concept was analyzed by Christensen, Hansen & Wilson (2024) and means generating false text output that looks extremely believable and very attractive to use. Thus, some consumers may choose AI generated texts with false information over TripAdvisor or official websites of the governmental institutions or tourism companies and thus make wrong decisions. In order to avoid this behavior, Christensen et al. (2024) suggest the effective engagement with consumers and creation of marketing offerings to align with their expectations for digital technologies in tourism experiences.

Network based and learning. In the case of the consumers, networking is defined as an important factor in increasing knowledge and skills while buying and consuming tourism services. For example, empirical research of Christensen et al. (2024) older adults were more open to learning digital skills if they had peer support available, especially within one's already existing social network. It can be assumed that the same could be applied to any category of the consumers of tourism services who seek to acquire new knowledge and would wish to explore new things in the tourism sphere. In general, one could emphasize that learning allows one to increase **intelligence**, or the ability to recognize even slight signals and make right decisions. In addition, networking and learning helps tourism consumers to be more **agile** towards digital and other innovations because lack of feeling of community and interaction, and lack of information about available services restrict adoption of innovations (Tuomi, Moreira Kares & Zainal Abidin, 2023).

Consumer behavior and sustainability. Holmes, Dodds & Frochot, (2021) noted that motivations that influence the sustainable traveler are significantly different from those that motivate the general traveler. World Food Travel Association research stated that "sustainability is now more than a buzzword as travelers (especially younger travelers) make more and more decisions with sustainability in mind" (Stone et al, 2020, p. 7). Holmes, Dodds & Frochot (2021) also emphasized the fact that sustainable tourists tend to be younger. However, *age* is not the only criterion to choose sustainable tourism services - *education* and *bigger income* are among them. For example, empirical research revealed that 74% of respondents had a university degree and were in a higher earning category. Individuals who demonstrate higher levels of frugality in their everyday behavior won't display a more sustainable travel behavior (Holmes, Dodds & Frochot, 2021).

Orea-Giner & Fusté-Forné (2021) also emphasize that tourists that treat travelling as a *hedonistic escape* to self-indulgence and seek for pleasure do not consider sustainability. In some cases, there could even be political reasons for resisting environmental messaging and thus rejecting sustainability attitudes (Corvo & Fontefrancesco, 2019).

However, the research with 6120 respondents from USA, Germany, United Kingdom, Australia, The Netherlands, and India made by von der Gathen, Eckert & Hagenbeek (2024) stated that sustainability is top 3 value (64 percent of respondents) and 54 percent of respondents could willingly pay more for sustainable services and products, however, not everyone of them knows, when the product is sustainable and /or they don't trust the statements made by product/service providers. Taking into account that sustainability itself may be a challenging task to the enterprises to achieve because they have to find various ways to decrease the production costs and product prices, to have stronger connections with local farmers, to increase the application of the zero-waste strategy, to increase the balance of workflow to the employees, etc. (Grumadaitė, Thomas Babu, 2024), producing and consuming sustainable services needs more consideration and theoretical and empirical research.

Conclusions and recommendations for future research

1. Smart tourism could be understood as a complex phenomenon, which is explained through the dimensions of intelligence, innovativeness, being based on networks and knowledge driven, learning, agility, sustainability and digitality.
2. Scientific literature analysis reveals various inconsistencies between provided tourism services and the needs, expectations and abilities of the consumers to accept and/ or value these service suggestions. Thus, more scientific theoretical and empirical scientific research is needed in order to develop a complex approach and to produce a conceptual framework to reveal the connections of tourism service provider and consumer, the dualities and factors of smart behavior.

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VARTOTOJŲ ELGSENOS YPATUMAI SUMANAUS TURIZMO KONTEKSTE

dr. Kristina Grumadaitė

dr. Sonny Jose

Santrauka

Šiame straipsnyje išplečiama sumanumo samprata, paprastai atspindinti šiuolaikinių skaitmeninių technologijų taikymą ir naudojimą, tokiu būdu apibrėžiant sumanųjį turizmą per įžvalgumo, novatoriškumo, grindžiamumo tinklais ir žiniomis, mokymosi ir lankstumo, tvarumo ir skaitmeniškumo dimensijas. Vadovaujantis šiomis dimensijomis, analizuojama vartotojų elgsena naudojantis turizmo paslaugomis. Ši analizė atskleidžia iššūkius išlaikyti darną tarp turizmo paslaugų teikimo ir naudojimo, siekiant panaudoti dvipusį sumanumą.

Raktiniai žodžiai: sumanus turizmas, sumanaus turizmo dimensijos, vartotojų elgsena.