



Smart Tourism and Smart City

Dr. Ranbir Singh, Associate Professor

Department of Tourism & Hotel Management

Central University of Haryana, Mahendergarh, Haryana, India

Ankush Duhan, Research Scholar (Ph.D.)

Department of Tourism & Hotel Management

Central University of Haryana, Mahendergarh, Haryana, India

Abstract

Smart cities has become a demand of residents in each country. The tourism industry is also initiating to integrate the tourism activities with the resources and infrastructure of smart cities. This study's aim to describe the smart city notion as well as to presenta view of integrated concept of smart city and smart tourism. Many researches revealed an importance of smart cities for residents as well as role of ICTs to make cities smart. There is need of more theoretical and empirical research on smart city.

Keywords: Smart Tourism, Smart City, Smart Tourism City, Smart Technology, ICTs.

Introduction

ICTs, such as IoT-facilitated gadgets and detecting devices, are transforming our everyday lives, and they also performs an important role in growth of city, like resource utilization, economy, and long-term sustainability (Lee et al., 2020). Population density, bad conditions, and significant challenges to cities are all consequences of rapid urbanization. Cities that are linked to smart technology and constructing smart cities learn about urbanization solutions (Lee et al., 2020). Like the previous years, the utilization of data and smart technologies are major sources of economic development, improving standard of life and sustainable growth currently (Carnahan et al., 2010). More destinations are focusing their efforts on deploying sources to create smart city that incorporate smart tourism like an intrinsic part of systems and operations (Khan et al., 2017).

The incorporation of intelligent technology provides for the enhancement of a city's worth. It aids in increasing efficiency, lowering expenses, and opening doors to new enterprises and services, all of which improve standards of living of citizens. There is a need of such type of smart system to make a city smart that can be create innovative opportunities for residents. Smart city is considered as a city of smart technologies which provides a sustainable



living and high standard of life to its residents through digital infrastructure(Bakıcı et al., 2013).Prioritizesofa smart city are alsocultural and social activities, as well as it has the potential to improve urban social connections (Christopoulou et al., 2014).

The objective of smart cities is to provide practical answers. There has been utilization ICTs by the government, private sector and smart city to furnish an interesting and improved solution by reducing growing list of difficulties(Caragliu et al., 2011).It's critical to examine the smart city trend in the tourism sector, specifically in terms of its impact on the tourist's choice process and the trip experiences(Lee et al., 2020).One essential aspect of the framework of smart city is a necessity for urban environments to be even more cognizant of their occupants and their desires (Gagliardi et al., 2017), implying active citizen participation and democratic participation.

Cities can now govern exclusive network or online platforms thanks to the availability of ICT technologies (Effing et al., 2011; Martí et al., 2012).An ongoing utilization of digital devicesfor the smart city has possibility of enhancing life quality(“The Development of Smart Cities in India: A Smart Notion of Promoting Travel and Tourism,” 2017).In tourism sector, smart destinations make it possible a city create a unique marketing pitch as well as to improve the overall visitors' experiences at the destination (Boes et al., 2015).It is a top priority of smart city management for all governments and regions. This method will help citizens to have a higher standard of living and prosper.

Smart city is an innovative as well as creative city where technology is accessible to everyone, advertising civic engagement, sustainable growth, and overall a good standard of life for residents.Therefore, this study's aim is to describe the smart city notion as well as to provide a view of the integrated notion of smart city and smart tourism. As a result, the study's contribution is a set of strategic problems as well as a research agenda for the futurerelated toresident's cooperation in tourism related urban development, that is to be examined farther (Lalicic & önder, 2018).Future research should use confirmatory research methodologies to investigate the STDRS system's practicality and usefulness (Khan et al., 2017).

Smart City

ICTs are main part of notion of smartness, with interconnection, synchronization, and concerted usage of many technologies. This refers to attempts in cities to use technology in



novel ways to promote sustainability, utilization of sources, and high standard of life (Lalicic & önder, 2018). However, according to (Caragliu et al., 2011), an emergence of 'smart cities' is dependent mainly on ICTs. Smart cities have distinct qualities that serve as a foundation for achieving goals (Khan et al., 2017).

This term "smart city" refers to a smart culture with a clean and tidy environment in which residents and visitors are given with the greatest infrastructure to meet their daily needs and live a healthy lifestyle in a sustainable environment. The words "smart city" as well as "intelligent city" or "digital city" are frequently used interchangeably (Albino et al., 2015).

Smart city is one in which digital technology is integrated into all aspects of city life. Smart city is thus characterized as an elevated, densely networked metropolis which employs cutting-edge new technologies to produce a metropolis with long-term viability, creative commerce, and improved living standard of its residents (Neirotti et al., 2014). The smart city concepts is a complicated method that requires long-term planning (Lee et al., 2020). The flow of information is processed and translated all thru the business infrastructures, IT and social to strengthen the the city's intelligence, which is referred to as smart city (Harrison et al., 2010).

The notion of smart city was created in response to rapid urbanisation and the consequent increase in local community requirements, as well as rising financial and environmental expenses. Because the phrase incorporates fields such as technology, communication, ecology, and sociology, it is difficult to describe a smart city clearly and accurately (Orlowski & Romanowska, 2019). Smart City has defined in literature in different ways, each of which differs based on the author's area of interest (Orlowski & Romanowska, 2019). The notions offered in the next paragraph are an instance of a diversified a new perspective on the issue of smart cities (Orlowski & Romanowska, 2019). It is vital to examine components that make up a Smart City in order to better comprehend its core (Orlowski & Romanowska, 2019).

In recent years, scholars have become increasingly interested in the notion of so-called "smart cities" or "smart destinations." (Lalicic & önder, 2018). Transportation, IT connectivity, water, and waste management are all essential in a smart city. New smart cities with diverse provisions can help to combat urban decline and achieve an equal distribution. Tourism can grow as a result of enhanced amenities, and visitors will be able to visit previously unknown locations. With the rapid pace of urbanization, a number of cities are faced with the task of



designing and developing a better city to live in (Lee et al., 2020). These cities must retain their sustainability in terms of sanitary management and improved connectivity.

Smart cities can fulfil major goals with resources reliant on ICT deployment and governance procedures based on efficiency, transparency and customer centricity (Storper & Scott, 2009). Furthermore, it is a critical aspect of these cities is citizens that participate at a good degree and use platforms to improve communication and coordination (Khan et al., 2017).

Technology, procedures, and people in how they integrate with diverse sectors such as public safety, transportation, telecom, healthcare, tourism, utilities, education, and buildings are the foundations of a smart city. Even control systems include web-enabled technologies that allow for a more integrated approach to result management (Khan et al., 2017). Due to the strengths, limitations, possibilities, and dangers distinct to each area, the separation into separate zones within a Smart City also allows for a better look at a specific city (Orlowski & Romanowska, 2019).

Smart Tourism & Smart City

The fourth industrial revolt has aided progression in every industry, including tourism (Lee et al., 2020). Several cities that capitalize on tourism competition rely on smart city. It is critical to examine smart city paradox in tourism environment, specifically in terms of its impact on the tourist's decision-making process and their trip experience (Lee et al., 2020).

Because of their same underlying features, the the notions of smart city and smart tourism are interrelated. However, one significant distinction between both is that smart cities assist their citizens, whereas smart tourism is primarily focused on tourists. Smart cities and smart tourism, in essence, link infrastructure and facilities while offering alternate to residents and visitors (Khan et al., 2017).

The fundamental trait shared by most conceptual frameworks is the ICT platform, which is critical to the smart city concept's effective implementation (Khan et al., 2017). As a result, smart cities are made up of interconnected tools that work together to give people with solutions that address the efficiency and convenience elements of their demands. Having said that, a smart city notion has been discussed in the literature from a variety of perspectives (Khan et al., 2017).



Smart Tourism City

As a result, tourist industry stakeholders see the smart tourism city, or transformation of smart tourism and smart city, like a vital mechanism for improving level of life for visitors and inhabitants alike (Lee et al., 2020). Smart tourism communities are willing to spend a significant amount of money to create and maintain smart tourism systems that address overtourism issues, safeguard inhabitants, and provide a better living environment (Yin et al., 2015). Smart tourism city, in this perspective, is a fascinating tourist destination that ensures ethical growth by facilitating (Bifulco et al., 2016) and enhancing tourists' interactions with encounters at the destination, thereby improving the citizens' standard of life.

The tourism industry has benefited from the fourth industrial revolution, and many cities are capitalising on this by creating smart tourism environment relying on the digital technology structures of smart city (Lee et al., 2020). These innovations in tourism have aided in the establishment of smart tourism cities.

With this perspective, smart tourism city is a forward-thinking tourist destination that fosters long-term development (Bifulco et al., 2016) and increases visitors' interactions with encounters at destination, thereby grow standard of life of the people. A majority of academics refer to a place as a "destination" instead of a "city." These concepts are rely on interconnected ICT infrastructures, however smart tourism cities place a greater emphasis on residents, whilst smart tourism destinations place a greater emphasis on improving tourists' experiences (Neuhofer et al., 2012).

Although smart tourist cities illuminate destination cities' competitiveness, the road to sustainability may be long and winding, with no shortcuts (Lee et al., 2020). The concept and paradigm of smart tourism towns must take into account a slew of other elements, like privacy and data storage. Therefore, towns are advised to exercise caution when conducting smart tourism city services (Lee et al., 2020).

Conclusion

This study has a major objective of integrated notion of smart tourism and smart cities. Firstly, importance of smart cities is described. It is presented how the smart cities with ICTs are transforming the way of living of people in an urban area. People are using the digital infrastructure and services to fulfill their needs and demands. Then the notion of smart cities is described through previous studies. Different studies have defined the smart cities as green



city, intelligent city, digital city etc. There is an integrated description of smart technologies with smart cities. In end, the integrated idea of smart city and smart tourism is described. It is highlighted how a smart city can be a destination of smartness. There is presented that smart technologies help the tourism sector to develop the smart city as smart tourism destination. Smart tourism can contribute a huge job in the infrastructural growth of smart cities. There is need of studies related to execution policies and people's co-operation to develop smart tourism city.

References

- Albino, V., Berardi, U., & Dangelico, R. M. (2015). Smart cities: Definitions, dimensions, performance, and initiatives. *Journal of Urban Technology*, 22(1), 3–21.
<https://doi.org/10.1080/10630732.2014.942092>
- Bakıcı, T., Almirall, E., & Wareham, J. (2013). A Smart City Initiative: The Case of Barcelona. *Journal of the Knowledge Economy*, 4(2), 135–148.
<https://doi.org/10.1007/s13132-012-0084-9>
- Bifulco, F., Tregua, M., Amitrano, C. C., & D'Auria, A. (2016). ICT and sustainability in smart cities management. *International Journal of Public Sector Management*, 29(2), 132–147. <https://doi.org/10.1108/IJPSM-07-2015-0132>
- Boes, K., Buhalis, D., & Inversini, A. (2015). Conceptualising Smart Tourism Destination Dimensions. *Information and Communication Technologies in Tourism 2015*, 391–403.
https://doi.org/10.1007/978-3-319-14343-9_29
- Caragliu, A., del Bo, C., & Nijkamp, P. (2011). Smart cities in Europe. *Journal of Urban Technology*, 18(2), 65–82. <https://doi.org/10.1080/10630732.2011.601117>
- Carnahan, S., Agarwal, R., & Campbell, B. (2010). The Effect of Firm Compensation Structures on the Mobility and Entrepreneurship of Extreme Performers. *Business*, 920(October), 1–43. <https://doi.org/10.1002/smj>
- Christopoulou, E., Ringas, D., & Garofalakis, J. (2014). The vision of the sociable smart city. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 8530 LNCS, 545–554.



https://doi.org/10.1007/978-3-319-07788-8_50

Effing, R., Van Hillegersberg, J., & Huibers, T. (2011). Social media and political participation: Are Facebook, Twitter and YouTube democratizing our political systems? *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 6847 LNCS(August), 25–35.

https://doi.org/10.1007/978-3-642-23333-3_3

Gagliardi, D., Schina, L., Sarcinella, M. L., Mangialardi, G., Niglia, F., & Corallo, A. (2017). Information and communication technologies and public participation: interactive maps and value added for citizens. *Government Information Quarterly*, 34(1), 153–166.

<https://doi.org/10.1016/j.giq.2016.09.002>

Harrison, C., Eckman, B., Hamilton, R., Hartswick, P., Kalaganam, J., Paraszczak, J., & Williams, P. (2010). Foundations for Smarter Cities. *IBM Journal of Research and Development*, 54(4), 1–16. <https://doi.org/10.1147/JRD.2010.2048257>

Khan, M. S., Woo, M., Nam, K., & Chathoth, P. K. (2017). Smart city and smart tourism: A case of Dubai. *Sustainability (Switzerland)*, 9(12). <https://doi.org/10.3390/su9122279>

Lalicic, L., & önder, I. (2018). Residents' involvement in urban tourism planning: Opportunities from a smart city perspective. *Sustainability (Switzerland)*, 10(6).

<https://doi.org/10.3390/su10061852>

Lee, P., Hunter, W. C., & Chung, N. (2020). Smart tourism city: Developments and transformations. *Sustainability (Switzerland)*, 12(10).

<https://doi.org/10.3390/SU12103958>

Martí, I. G., Rodríguez, L. E., Benedito, M., Trilles, S., Beltrán, A., Díaz, L., & Huerta, J. (2012). Mobile application for noise pollution monitoring through gamification techniques. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 7522 LNCS(September), 562–571. https://doi.org/10.1007/978-3-642-33542-6_74

Neirotti, P., De Marco, A., Cagliano, A. C., Mangano, G., & Scorrano, F. (2014). Current trends in smart city initiatives: Some stylised facts. *Cities*, 38, 25–36.



<https://doi.org/10.1016/j.cities.2013.12.010>

Neuhofer, B., Buhalis, D., & Ladkin, A. (2012). Conceptualising technology enhanced destination experiences. *Journal of Destination Marketing and Management*, 1(1–2), 36–46. <https://doi.org/10.1016/j.jdmm.2012.08.001>

Orlowski, A., & Romanowska, P. (2019). Smart Cities Concept: Smart Mobility Indicator. *Cybernetics and Systems*, 50(2), 118–131. <https://doi.org/10.1080/01969722.2019.1565120>

Storper, M., & Scott, A. J. (2009). Rethinking human capital, creativity and urban growth. *Journal of Economic Geography*, 9(2), 147–167. <https://doi.org/10.1093/jeg/lbn052>

The Development of Smart Cities in India: A Smart Notion of Promoting Travel and Tourism. (2017). *International Journal of Research in Tourism and Hospitality*, 3(1). <https://doi.org/10.20431/2455-0043.0301005>

Yin, C. T., Xiong, Z., Chen, H., Wang, J. Y., Cooper, D., & David, B. (2015). A literature survey on smart cities. *Science China Information Sciences*, 58(10), 1–18. <https://doi.org/10.1007/s11432-015-5397-4>