© Emerald Publishing Limited. This AAM is provided for your own personal use only. It may not be used for resale, reprinting, systematic distribution, emailing, or for any other commercial purpose without the permission of the publisher.

The following publication Tung, V.W.S., Cheong, T.M.F. and To, S.J. (2020), "Tourism management in the era of smart mobility: a perspective article", Tourism Review, Vol. 75 No. 1, pp. 283-285 is published by Emerald and is available at https://doi.org/10.1108/TR-05-2019-0180.

Title: Tourism management in the era of smart mobility: A perspective article

Abstract

<u>Purpose</u> – The purpose of this paper is to review the past and future perspectives of smart mobility in the context of destinations.

<u>Findings</u> - The development of smart mobility will bring unprecedented changes to tourism management, particularly in the areas of tourist travel patterns and decision-making.

<u>Originality/value</u> – It is relevant and timely to discuss the link between smart mobility and tourism management given the profound changes that they will bring to smart destinations.

Introduction

Advancements in information communication technology (ICT) have had profound impact on tourist experiences. It has changed the way tourists plan their trips, capture their onsite experiences, and recollect their travel memories. ICT has also enabled marketers to quickly gather intelligence, as well as engage in dialogue and co-create tailored experiences with consumers (Rihova et al., 2018).

While a review of all the current progress in ICT is beyond the scope of this article, the purpose of this paper is to focus on one major area under rapid development: the concept of smart mobility within a smart tourism destination perspective. Expanding from the smart city concept, smart destinations connect ICT infrastructure with governance and investments in human and social capital to support sustainable economic growth and resource management. The aim is to foster high quality of life (Anthopoulos, Janssen, & Weerakkody, 2019). This concept broadly covers six dimensions: governance, environment, living, economy, people, and mobility (Cohen, 2013).

Smart mobility in the present context refers to the application of ICT to facilitate tourist accessibility and movement at a destination. Smart mobility will have significant implications for tourism management, particularly in the areas of tourist travel patterns and decision-making. Momentum for smart mobility will likely increase over the next several decades.

Past perspective

Smart mobility is a multifaceted topic that has initiated different lines of work (see Figure 1). One line of work focused on the potential benefits of smart mobility on citizens' quality of life (Zygiaris, 2013). These benefits include: 1) reducing pollution; 2) reducing traffic congestion; 3) increasing safety; 4) improving transfer speed; and 5) reducing transfer cost. A second line of work focused on the implementation of technology for smart mobility. Research concentrated on three forms of ICT that are necessary: cloud computing, internet of things (IoT), and end-user

internet service system (Guo et al. 2014). This work also addressed the appropriate use of technological platforms and ICT for upcoming changes in public and private mobility.

A third line work examined the roles and governance structures of different stakeholders in smart mobility. Stakeholders may include public bodies and local government, public transport organizations, and private companies and citizens (Benevolo, Dameri, & D'Auria, 2016). This line of work explored destination management components, including leadership, human capital, entrepreneurship, innovation, and social capital, that could be aligned with ICT in smart mobility. Previous research in this area also explored destination components, such as attractions and activities, as they align with smart mobility and other dimensions of smartness (Buhalis & Amaranggana, 2014).

--- Insert Figure 1 here ---

Future perspective

There will be profound changes to smart mobility related to accessibility at a destination, as well as movement from home into a destination and between destinations. Autonomous driverless vehicles, such as robo-taxis and even hybrid-electric vertical takeoff and landing vehicles, could enable in-vehicle transit experiences that connect entertainment content providers, data and analytics organizations, advertisers, and social media companies to make the in-transit experience relaxing, productive, or entertaining (Lineberger, Hussain, & Rutgers, 2019). New forms of core technologies that are relevant to smart mobility, such as device-positioning and location technologies, could provide real-time information of transport networks to end-user internet service systems. Smart mobility could also bring travel decision-support technologies to yet another dimension: the ability for the virtual personal assistants and chatbots to provide answer in real-time while tourists are in motion.

IoT will provide smart destinations with information automation and control, enabling tourism suppliers to offer location-based products and services (Palos-Sanchez, Saura, Reyes-Menendez, & Esquivel, 2018). From a mobilities perspective, destinations could map a grid of IoT devices to assess tourist movements (e.g., through transportation networks including buses and subways) and spending patterns (e.g., at restaurants or even localized vending machines). This could enable suppliers to connect mobility intelligence with proximity marketing techniques. Marketers could relay nearby information and push tailored recommendations that tourists can download in real-time via their smartphones, watches, and other personal IoT accessories.

Conclusion

The development of smart mobility will bring unprecedented changes to destinations. Nevertheless, it is crucial to remember that the tourist experience is the center of importance (Tung & Ritchie, 2011), and the goal is to implement technologies to enhance experiences, thereby increasing the competitiveness of a destination (Ritchie et al. 2011).

References

- Anthopoulos, L., Janssen, M., & Weerakkody, V. (2019). A Unified Smart City Model (USCM) for smart city conceptualization and benchmarking. In *Smart Cities and Smart Spaces: Concepts, Methodologies, Tools, and Applications* (pp. 247-264). IGI Global.
- Benevolo C., Dameri R.P., D'Auria B. (2016) Smart Mobility in Smart City. In: Torre T., Braccini A., Spinelli R. (eds) Empowering Organizations. Lecture Notes in Information Systems and Organisation, vol 11. Springer, Cham
- Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations enhancing tourism experience through personalisation of services. In I. Tussyadiah, & A. Inversini (Eds.), Information and communication technologies in tourism 2015 (pp. 377–389). Cham: Springer.
- Cohen, B. (2013). The smart city wheel. Retrieved May 17, 2019, from https://www.smart-circle.org/smartcity/blog/boyd-cohen-the-smart-city-wheel/
- Guo, Y., Liu, H., & Chai, Y. (2014). The embedding convergence of smart cities and tourism internet of things in China: An advance perspective. *Advances in Hospitality and Tourism Research*, 2(1), 54–69.
- Lineberger, R., Hussain, A., & Rutgers, V. (2019). *The elevated future of mobility: What's next on the horizon?* Retrieved from https://www2.deloitte.com/insights/us/en/focus/future-of-mobility/evtol-elevated-future-of-mobility-summary.html
- Palos-Sanchez, P., Saura, J. R., Reyes-Menendez, A., & Esquivel, I. V. (2018). Users acceptance of location-based marketing apps in tourism sector: an exploratory analysis. *Journal of Spatial and Organizational Dynamics*, 6(3), 258-270.
- Rihova, I., Buhalis, D., Gouthro, M. B., & Moital, M. (2018). Customer-to-customer co-creation practices in tourism: Lessons from Customer-Dominant logic. *Tourism Management*, 67, 362-375.
- Ritchie, J. R., B., Tung, V. W. S. & Ritchie, R. (2011). Tourism experience management research: Emergence, evolution and future directions. *International Journal of Contemporary Hospitality Management*, 23(4), 419-438.
- Tung, V. W. S., & Ritchie, J. B. (2011). Exploring the essence of memorable tourism experiences. *Annals of Tourism Research*, 38(4), 1367-1386.
- Zygiaris, S. (2013). Smart city reference model: Assisting planners to conceptualize the building of smart city innovation ecosystems. *Journal of the Knowledge Economy*, 4(2), 217-231.