



PREFERRED SOCIAL NETWORKING APP BY EMPLOYEES IN TOURISM AND HOSPITALITY INDUSTRY IN KENYA

 **Kabii Francis¹⁺**
Naghea Jilo²

¹Lecturers, Kenya Utalii College, Nairobi, Kenya.

Email: fkabii@utalii.ac.ke

²Research Assistant, Kenya Utalii College, Kenya.

Email: jilonaghea@gmail.com



(+ Corresponding author)

ABSTRACT

Article History

Received: 6 April 2020

Revised: 26 November 2020

Accepted: 4 January 2021

Published: 9 February 2021

Keywords

Preferred
Social
Media
Application
Tourism
Employees.

The purpose of this paper was to examine the preferred social media application network by employees in the tourism and hospitality industry. The specific aims were to examine the preferred social media amongst Facebook, WhatsApp, Twitter, Instagram, LinkedIn, email and YouTube, examine the relationship between respondent's gender, a position at workplace and choice of social media and finally find out official the duties performed by the respondent's using the smartphones. The finding indicated that the most popular social media platform was WhatsApp (93%) closely followed by Email (84%) and the least being LinkedIn used by only 25% of respondents. Employees' gender ($\chi^2=5.880$, $df=1$, $p<0.05$) and position at the workplace ($\chi^2=9.585$, $df=2$, $p<0.05$) had minimal influence on the selection of social media preference. The majority (81 %) of the respondents perform up to 50% of their official duties with the help of their smartphones translating to improved and effective customer services, reduced operation cost, and healthier business performance. The study concluded that WhatsApp and Email were the most preferred social media network and were used to communicate and transact business with customers and other stakeholders in the tourism and hospitality industry. Smartphones are no longer luxury tools but are part of the technology that every employee in the industry must adapt to.

Contribution/Originality: This study is one of the very few studies that have investigated the preferred media network by employees in the tourism and hospitality industry in Kenya. The paper's primary contribution is the finding that WhatsApp and Email were the most preferred social media network and were used to communicate and transact business between employees and customers and stakeholders in the industry.

1. INTRODUCTION

Notably, more than 90% of employees in Kenya own a smartphone and in most cases; you see people performing different services using a smartphone more than their laptops and desktop computers. This may be partly because mobile application capabilities allow users to access browsers while hybrid App-web installed in a smartphone enable users to access the internet Lama (2019) and Kvist and Mathiasson (2019). Mobile applications are used as constant reminders of business existence and engage customers' in the hospitality industry. They increase customer accessibility with reduced communication costs and increased efficiency. Most people in Kenya who have Smartphones can easily gain internet connectivity and access to social networks. In Kenya, 87% of adults own a mobile device while only 3% do not use a mobile phone.

The general objective of the study was to examine the preferred social media network by employees in the tourism and hospitality industry in Kenya. The specific objectives of the study were to investigate whether the

gender of the employee, their age, and the position at the workplace influenced the choice of social media platform preferred by respondents. It intended to answer the following three questions: Does the age of the employee influence social media choice? What about gender? Does the employee in operation, supervision, and management prefer the same social media features on their mobile phone? The study hypothesizes that there is no significant relationship between employee's demography (Gender, age, position) and their social media preference. Studies on the effect of social media on the hospitality industry have been conducted by many scholars (Bilgin, 2018; Choi, Wang, & Sparks, 2019; Garrido-Moreno, García-Morales, Lockett, & King, 2018; Holston-Okae, 2018; Minazzi & Lagrosen, 2013; Perera & Perera, 2018; Stojanovic, Andreu, & Curras-Perez, 2018). Milla and Mataruna-Dos-Santos (2019) acknowledge that only a handful of studies have been conducted to examine the relations between employee demography and social media preference. This is the contribution of the study.

A report by the Communication Authority of Kenya (COA) indicated that by the year 2018, the number of active mobile subscriptions in Kenya was 46.6 million. Within the same period, the total number of active Internet/data subscriptions stood at 42.2 million while the number of mobile commerce transactions was 526.9 million, valued at Ksh.1.5 trillion. The total number of outgoing short messages stood at 15.4 billion. In Kenya just as in other parts of the world, the digital explosion in communication has affected the way business in tourism and hospitality is conducted (Benckendorff, Xiang, & Sheldon, 2019; Femenia-Serra, Perles-Ribes, & Ivars-Baidal, 2019; Kim & Law, 2015; Lee & Mills, 2007; Oskam & Boswijk, 2016). In their study, Phongtraychack and Dolgaya (2018); Thomas, Vernet, and Gann (2014), and Griffith (1994) observed that the effect is not only in communication as digital money transfer may soon replace physical cash and credit cards.

The industry has realized that most travelers carry their Smartphones and use them for travel-related activities. A couple of years back, the tourism industry shared tourism information through radio, television, magazines, or newspapers (Sindiga, 2018) and Shi, Sun, Shen, Li, and Qu (2010). Currently, due to the evolving technology, the industry provides tourism services via the internet which can be accessed using the smartphone as it is quick and convenient for both the travelers and the tourism service providers. The smartphone ownership rates in Kenya have strikingly risen and will continue to rise due to the low costs of purchase.

Given this, the study aimed to examine whether the employees in the tourism and hospitality industry owned a smartphone and how they used them to improve their performance at work.

2. LITERATURE REVIEW

The evolution of information and communication technologies (ICTs) is greatly influencing the tourism and hospitality industry resulting in its success (Adeola & Evans, 2019). Information technology for instance mobile internet, networking, and cloud computing has helped improve the efficiency and effectiveness of tourism services as well as reduce costs of these services (Elazhary, 2019; Gretzel, Sigala, Xiang, & Koo, 2015; Jin, Gubbi, Marusic, & Palaniswami, 2014; Li, Xu, Wang, & Wang, 2012; Sanaei, Abolfazli, Gani, & Buyya, 2013). The integration of ICT has led to the realization of smart tourism which has brought on mobile digital connectivity thereby creating more intelligent levels in the tourism systems (Li, Hu, Huang, & Duan, 2017).

As stated by Dorcic, Komsic, and Markovic (2019) smart tourism tries to offer all services via the smartphone. There has been a noticeably huge growth in smartphone ownership rates and internet access rates in the developing countries and emerging economies since 2013. Pontes, Szabo, and Griffiths (2015) noted that due to the increasing popularity of internet usage via smartphones in the global population, the majority of the users are participating fully in the economic and societal activities of modern life.

The uptake of smartphone technology therefore presents great opportunities for tourism and hospitality service providers and tourism organizations and destinations. Many tourism businesses are trying to offer businesses and services to tourists through the use of smartphones because it is convenient for both the tourist and the service provider. The smartphone contains travel-related applications such as a built-in digital camera, GPS navigator,

browser, e-commerce sites, e-bank, and e-ticket that prove to be beneficial to the travelers in meeting their needs and enriching their experiences when on a trip. Users can be able to browse the internet, look at their emails, or make payments during their trips. According to Internet World Stats, there has been a tremendous rise in internet penetration globally. Kenya has the highest internet user rate in Africa of 89 %.

2.1. Social Media Networks and its Impacts on the Tourism and Hospitality Industry

New emerging technology trends such as social media have played a major role in the growth of the tourism and hospitality industry (Lim, 2010). The use of social media marketing and advertising has considerably risen in the tourism industry over the past years due to ease of purchase of products from the internet, time-saving and low costs of internet updates (Amersdorffer, Bauhuber, & Oellrich, 2012; Dahl, 2018; De Mooij, 2018). Social channels have proven to be of the essence to the tourism industry as they can: spread awareness of the brand quickly and far; encourage interaction with clients; increase sales and revenues; reduce operating costs; improve customer satisfaction and service; and manage the reputation of the brand (Sterne, 2010). Due to the high competitiveness of the sector, businesses need to consider an appealing alternative for them to retain their customers and even attract new customers. Social media marketing is with greater reason the most ideal sales platform which corresponds to virtual global marketing (Chaffey & Ellis-Chadwick, 2019) and Lim (2010).

Social media platforms such as WhatsApp, Facebook, Instagram, YouTube, and Twitter have grown in popularity over the years. This is because they are viral, easily accessible, and highly influential to users. Tourists share information, photos, links, and experiences about areas they have visited on social media platforms to help other tourists in decision making when they are planning vacations.

Social media channels allow marketers to connect and communicate with their current and prospective customers. The marketers can share information on services and products on social media and at the same time, the customers can offer feedback on their experiences (Buttle & Maklan, 2019) and Benea (2014). Trip advisor is a popular social media tool used in the tourism industry. Many travelers visit this site when selecting tourism products and later post online reviews of their travel experiences.

3. STUDY METHODOLOGY

The study was composed of a sample size of 380 employees in the tourism and hospitality industry that were randomly selected from Nairobi, Mombasa, and Nakuru. The target populations were supervisors and managers of selected hotels and lodges. The study was descriptive. Quantitative data was collected using questionnaires while qualitative data was collected using interviews. The reliability test indicated that the data collection tools had Cronbach's Alpha of 0.651 that was considered valid and reliable.

4. FINDINGS AND DISCUSSIONS

Of the total of 380 practitioners who participated in the research, 55% of them were males and while 45% were females. Nearly all of them (97%) owned a smartphone which they used to perform different duties in and out of the office. Despite them having laptops and desktop computers most of them said their social networking app in their smartphone to achieve their company's objectives. This shows that majority of respondents were digitally connected and able to access the internet. This could be attributed to the low cost of purchasing a smartphone in the country. A majority (74%) use their phones to do perform their daily duties while at work and while away.

According to the survey, the majority of the respondents (49%) were operations level, 37% were in supervisory positions while only 14% were in managerial positions. Of these respondents, a majority (63%) were youth aged between 20 and 35 years of age. The study noted majority (81 %) of the respondents perform up to 50% of their duties with the help of their smartphones even though 73% of the same respondents agreed that they use less than 50% of Smartphone features and capabilities.

4.1. Preferred Social media in Smartphone

The survey investigated the social-networking applications that were mostly used by the tourism and hospitality employees to improve their performance. Seven social networking apps were listed from which the participants were to indicate which ones they used in their communication and the level of preference. They were limited to Facebook, WhatsApp, Twitter, Instagram, LinkedIn Email, and YouTube. The most popular social media platform used was WhatsApp (93%) which was closely followed by Email (84%). LinkedIn was the rarest social media platform used with only 25% actively involved in it. Twitter and Instagram were not frequently used by the respondent's Figure 1. At this point, it was noted that there was no significant relationship between the respondent's selection of social networking for those who frequently use Facebook, WhatsApp, Twitter, and emails.

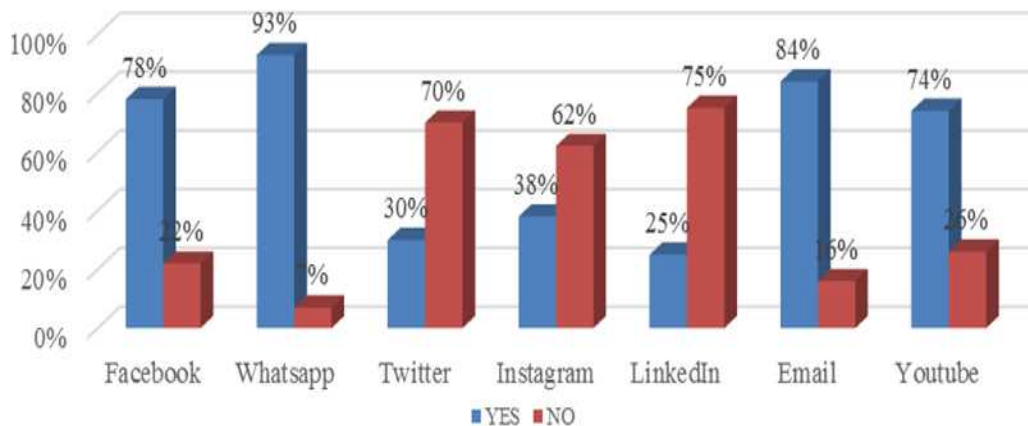


Figure-1. Preferred social media by employees in tourism and hospitality.

Table-1. Social media platforms used by respondents.

Which of the following social media platform are you actively involved in?							
	Facebook	WhatsApp	Twitter	Instagram	LinkedIn	Email	YouTube
% of usage by respondents	Yes 78%	Yes 93%	Yes 30%	Yes 38%	Yes 25%	Yes 84%	Yes 74%
Chi-Square Goodness of fit	118.274 ^a	286.579 ^a	59.211 ^a	22.274 ^a	95.000 ^a	180.642 ^a	89.095 ^a
df	1	1	1	1	1	1	1
Asymp. Sig.	.0001	.001	.001	.001	.001	.001	.001

Note: a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 190.0.

Most employees in tourism and hospitality use different social media networks in their normal duties. However, majority (93%) of respondents use WhatsApp ($\chi^2=118.274$, $df=1$, $p<0.001$), 84% use email ($\chi^2=180.642$, $df=1$, $p<0.001$) with the least being LinkedIn 25% ($\chi^2=95$, $df=1$, $p<0.001$). There was no clear explanation of the preference which may call for more studies.

Chi-square goodness of fit test showed that there was more usage of some social media networks when compared to others and the observed frequencies were so much higher in all social media networks than expected Table 1.

4.2. Relationship Between Respondent's Gender Social Media Preference

The study also noted that the minority (38%) of respondents use Instagram as a social media of preference while the majority (62%) said they rarely use it. From this percentage, 47% of them were males as compared to 53% who were female meaning more ladies used Instagram as compared to males. This observation was significant $\chi^2=5.880$, $df=1$, $p<0.05$ meaning that there was some relationship between gender and use of Instagram as a preferred social media Table 2. This relationship was not significant with other social media (Twitter, Facebook,

LinkedIn, and YouTube) used in the study. This finding means the gender of the participants did not significantly influence the selection of other social media of other the use of Instagram as given in Table 2.

Table-2. Relationship between respondent's gender social media Preference.

Crosstabulation between gender and Instagram				conclusion
Gender	Yes	No	Chi-Square cross-tabulation	Respondents gender influenced the use of Instagram only
Male	47%	60%	$\chi^2=5.880$, df = 1, p<0.05	
Female	53%	40%		
Total	100%	100%		

4.3. Relationship between Respondent's Positions and Social Media Preference

The study further investigated whether there was any relationship between the respondent's use of different social media and their position at the workplace. The study assumed that employees at different levels used different social media available on their phones. The respondents were categorized in three management, supervisory, and operations or technical Table 3 Cross-tabulation was conducted using respondent's level at their workplace as the independent variable and selected categories of social media as dependent variables. The result showed that irrespective of their position at a place of work, the three categories of employees used different types of social media applications on their smartphones. There was no significant relationship for most of these media applications other on their use of Instagram. From all respondents who said they use Instagram the majorities (59%) were in operation level as compared to 32% who were supervisors. The minority 9% were those at the management level. There was a significant ($\chi^2=9.585$, df =2, p<0.05) relationship between employees' usage of Instagram and their position in Table 3.

Table-3. Relationship between respondent's position and social media Preference.

Crosstabulation between respondents' level and use of Instagram				
Information sought. Is Instagram your preferred social media?				
Respondents Position	Yes	No	Chi-Square cross-tabulation	Conclusions
Middle Management level	9%	17%	$\chi^2=9.585$, df =2, p<0.05	Employees level influenced the respondent's social media preference
Supervisory level	32%	40%		
Operations /technical level	59%	43%		
Total	100%	100%		

4.2. Relationship between Age and Social Media Preference

The study hypothesized that there is no significant relationship between employee's age and social media preference in their smartphones. Chi-square cross-tabulation was conducted using age as the independent variable and choices social media as the dependent variables. The finding indicated that (73%) of respondents who use Twitter, (72%) who use Instagram, and 67% who use YouTube as preferred social media were aged between 20 to 35 years. The remaining respondents aged 35 to 60 years rarely use Twitter, Instagram, and YouTube. This relationship was significant $\chi^2=10.858$, df =3, p<0.05 for use of Twitter, $\chi^2=18.816$, df =3, p<0.05 use of Instagram, and $\chi^2=17.867$, df =3, p<0.05 use of YouTube Table 4.

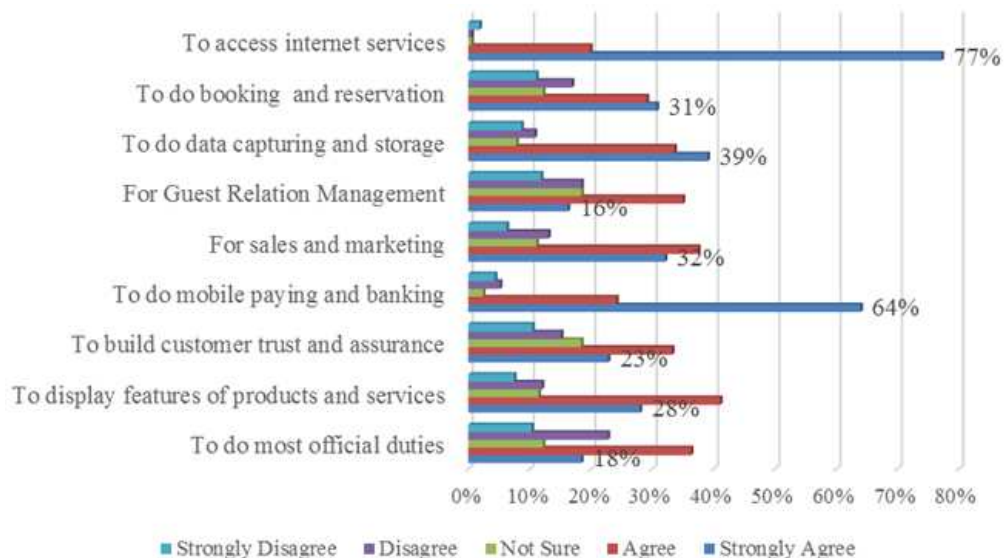
The study, therefore, rejected the null hypothesis and concluded that the age of respondents significantly influenced the social media (Twitter, Instagram, and YouTube) preference of the respondents. Although respondents also use Facebook, WhatsApp, emails, and LinkedIn the relationship was not significant at P<0.05.

Table-4. Relationship between the respondent's age and social media Preference.

Relationship between the respondent's age and usages of Twitter				Conclusions
Respondents age	Yes	No	Chi-Square cross-tabulations	
Less than 20 years	16%	16%	$(\chi^2=10.858, \text{ df } =3, p<0.05)$	Respondents aged between 20 to 35 yrs. used Twitter as their preferred social media
20 to 35 years	73%	59%		
35 to 45years	10%	19%		
45 to 60 years	1%	6%		
Relationship between the respondent's age and usages of Instagram				
Less than 20 years	19%	14%	$(\chi^2=10.858, \text{ df } =3, p<0.05)$	Respondents aged between 20 to 35 yrs. used Instagram as their preferred social media
20 to 35 years	72%	59%		
35 to 45years	9%	20%		
45 to 60 years	1%	7%		
Relationship between the respondent's age and usages of YouTube				
Less than 20 years	17%	13%	$(\chi^2=10.858, \text{ df } =3, p<0.05)$	Respondents aged between 20 to 35 yrs. used YouTube as their preferred social media
20 to 35 years	67%	53%		
35 to 45years	14%	22%		
45 to 60 years	3%	11%		

4.3. Official Duties Performed by Employees with The Help of The Smartphones

The respondents were queried about how the usage of Smartphones enhanced their service quality. The study noted that the most frequent use of the smartphone was to access internet services (77%) and mobile paying and banking were ranked second at 64%. The least rated use of the smartphone was for Guest Relation Management and use of the smartphone to do most official duties. Another usage of the smartphone was booking accommodation and transport (31%), data capturing and storage (39%), sales and marketing (32%), customer relations (23%), and display product features and services Figure 2. These activities translate into cost-effective and improved business performance.

**Figure-2.** Duties Performed by Employees with The Help of The Smartphones.

4.4. Preferred Features in Smartphone

The employees were asked to state the features of the Smartphone they use to improve the quality of service. Nearly all (97%) of the respondents stated that they used their Smartphone's to access the internet, 86% used their Smartphones in taking digital photography, 85% used their smartphones to download job-related applications and

84% used their Smartphone to send official text messages. About 74% of the respondents also stated that they work comfortably using their Smartphones more than the desk and laptops.

4.5. Preferred Operating Systems

All Smartphones possess operating system software that is designed to run programs and applications of the device. The study was interested in only three types of operating systems namely BlackBerry, Windows Mobile, and Android. About 89% of the respondents used the Android operating system with only 5% using the BlackBerry Operating System. This shows that the majority of smartphone users in the industry prefer the Android operating system which is attributed to the low costs of Smartphones which run on it in Kenya.

5. CONCLUSION

This study concludes that the preferred social network was WhatsApp followed by Email communication. There was a minimal noted relationship between employees' age and position in employment and social media network of preference other than the use of Instagram. Most of the respondents stated that they work comfortably using their Smartphones more than the desk and laptops as they work from home when not in their offices. The majority (81 %) of the respondents perform up to 50% of their duties with the help of their smartphones. It was also noted that the age of respondents had minimal influence on social media preference other than Twitter, Instagram, and youtube whose usage was significantly influenced by age (20 to 35 yrs.). The majority of the smartphone users in the industry prefer the Android operating system.

From the study, there is no doubt that the penetration of smart technology has greatly improved the tourism and hospitality industry. The use of a smartphone is a fast and convenient way to better people's well-being and has become a necessity in people's daily life.

The competitiveness of the hotel industry and tourism destinations has grown especially due to modern technologies and internet connectivity. To satisfy the expectations of tourists in the future, there is a need to equip employees in the industry with modern digital technologies that come with Smartphones.

Smartphones are no longer luxury tools but are part of the technology that every employee in the industry must adapt to. This has come with its challenge to an employer in managing the correct usage since if not well managed may be abused by spending more time on unofficial social media networks. Likewise, an employer can engage employees to be working for them outside the normal working hours without any reward for overtime.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Acknowledgement: Both authors contributed equally to the conception and design of the study.

REFERENCES

- Adeola, O., & Evans, O. (2019). Digital tourism: Mobile phones, internet, and tourism in Africa. *Tourism Recreation Research*, 44(2), 190-202. Available at: <https://doi.org/10.1080/02508281.2018.1562662>.
- Amersdorffer, D., Bauhuber, F., & Oellrich, J. (2012). The economic and cultural aspects of the social web: Implications for the tourism industry. *Journal of Vacation Marketing*, 18(3), 175-184. Available at: <https://doi.org/10.1177/1356766712449364>.
- Benckendorff, P. J., Xiang, Z., & Sheldon, P. J. (2019). *Tourism information technology*: Cabi.
- Benea, I. (2014). *Influences of social media on the tourism and hospitality industry*: Modul University.
- Bilgin, Y. (2018). The effect of social media marketing activities on brand awareness, brand image, and brand loyalty. *Business & Management Studies: An International Journal*, 6(1), 128-148. Available at: <https://doi.org/10.15295/v6i1.229>.
- Battle, F., & Maklan, S. (2019). *Customer relationship management: Concepts and technologies*: Routledge.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing*: UK: Pearson

- Choi, K., Wang, Y., & Sparks, B. (2019). Travel app users' continued use intentions: It's a matter of value and trust. *Journal of Travel & Tourism Marketing*, 36(1), 131-143. Available at: <https://doi.org/10.1080/10548408.2018.1505580>.
- Dahl, S. (2018). *Social media marketing: Theories and applications*. Sage.
- De Mooij, M. (2018). *Global marketing and advertising: Understanding cultural paradoxes*. SAGE Publications Limited.
- Doricic, J., Komsic, J., & Markovic, S. (2019). Mobile technologies and applications towards smart tourism—state of the art. *Tourism Review*.
- Elazhary, H. (2019). Internet of things (IoT), mobile cloud, cloudlet, mobile IoT, IoT cloud, fog, mobile edge, and edge emerging computing paradigms: Disambiguation and research directions. *Journal of Network and Computer Applications*, 128, 105-140. Available at: <https://doi.org/10.1016/j.jnca.2018.10.021>.
- Femenia-Serra, F., Perles-Ribes, J., & Ivars-Baidal, J. (2019). Smart destinations and tech-savvy millennial tourists: Hype versus reality. *Tourism Review*, 74(1), 63-81.
- Garrido-Moreno, A., García-Morales, V. J., Lockett, N., & King, S. (2018). The missing link: Creating value with social media use in hotels. *International Journal of Hospitality Management*, 75, 94-104. Available at: <https://doi.org/10.1016/j.ijhm.2018.03.008>.
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart Tourism: Foundations and developments. *Electronic Markets*, 25(3), 179-188. Available at: <https://doi.org/10.1007/s12525-015-0196-8>.
- Griffith, R. (1994). *Cashless society or digital cash? Paper from Dept. of Economics & Finance, Stephen F.* Austin State University.
- Holston-Okae, B. L. (2018). The effect of employee turnover in the hospitality industry: Quantitative correlation study. *International Journal of Learning and Development*, 8(1), 156-183. Available at: <https://doi.org/10.5296/ijld.v8i1.12513>.
- Jin, J., Gubbi, J., Marusic, S., & Palaniswami, M. (2014). An information framework for creating a smart city through the internet of things. *IEEE Internet of Things Journal*, 1(2), 112-121. Available at: <https://doi.org/10.1109/jiot.2013.2296516>.
- Kim, H. H., & Law, R. (2015). Smartphones in tourism and hospitality marketing: A literature review. *Journal of Travel & Tourism Marketing*, 32(6), 692-711. Available at: <https://doi.org/10.1080/10548408.2014.943458>.
- Kvist, J., & Mathiasson, P. (2019). Progressive web apps and other mobile developing techniques: A comparison.
- Lama, N. (2019). Providing native experiences in mobile with PWA.
- Lee, J., & Mills, J. E. (2007). Exploring tourist satisfaction with mobile technology. *Information and Communication Technologies in Tourism 2007* (pp. 141-152). Vienna: Springer.
- Li, S., Xu, L., Wang, X., & Wang, J. (2012). Integration of hybrid wireless networks in cloud services-oriented enterprise information systems. *Enterprise Information Systems*, 6(2), 165-187. Available at: <https://doi.org/10.1080/17517575.2011.654266>.
- Li, Y., Hu, C., Huang, C., & Duan, L. (2017). The concept of smart tourism in the context of tourism information services. *Tourism Management*, 58, 293-300. Available at: <https://doi.org/10.1016/j.tourman.2016.03.014>.
- Lim, W. (2010). *The effects of social media networks in the hospitality industry*. UNLV Theses, Dissertations, Professional Papers, and Capstones.
- Milla, A. C., & Mataruna-Dos-Santos, L. J. (2019). Social media preferences, interrelations between the social media characteristics and culture: A view of Arab nations. *Asian Social Science*, 15(6), 71-77.
- Minazzi, R., & Lagrosen, S. (2013). Investigating social media marketing in the hospitality industry: Facebook and European hotels. *Information and Communication Technologies in Tourism 2014* (pp. 145-157). Cham: Springer.
- Oskam, J., & Boswijk, A. (2016). Airbnb: The future of networked hospitality businesses. *Journal of Tourism Futures*, 2(1), 22-42. Available at: <https://doi.org/10.1108/jtf-11-2015-0048>.
- Perera, G. R., & Perera, I. (2018). Influence of social media marketing on the brand image of organizations in the hospitality industry of Sri Lanka. In *Media Influence: Breakthroughs in Research and Practice* (pp. 371-383): IGI Global.
- Phongtraychack, A., & Dolgaya, D. (2018). *Evolution of mobile applications*. Paper presented at the In MATEC Web of Conferences EDP Sciences.

- Pontes, H. M., Szabo, A., & Griffiths, M. D. (2015). The impact of Internet-based specific activities on the perceptions of Internet addiction, quality of life, and excessive usage: A cross-sectional study. *Addictive Behaviors Reports, 1*, 19-25. Available at: <https://doi.org/10.1016/j.abrep.2015.03.002>.
- Sanaei, Z., Abolfazli, S., Gani, A., & Buyya, R. (2013). Heterogeneity in mobile cloud computing: Taxonomy and open challenges. *IEEE Communications Surveys & Tutorials, 16*(1), 369-392.
- Shi, X., Sun, T., Shen, Y., Li, K., & Qu, W. (2010). *Tour-guide: Providing location-based tourist information on mobile phones*. Paper presented at the 10th IEEE International Conference on Computer and Information Technology.
- Sindiga, I. (2018). *Tourism and African development: Change and challenge of tourism in Kenya*: Routledge.
- Sterne, J. (2010). *Social media metrics* (1st ed.). New Jersey: John Wiley& Sons, Inc.
- Stojanovic, I., Andreu, L., & Curras-Perez, R. (2018). Effects of the intensity of use of social media on brand equity: An empirical study in a tourist destination. *European Journal of Management and Business Economics, 27*(1), 83-100.
- Thomas, L. D., Vernet, A., & Gann, D. M. (2014). *Digital money: How ready are countries to adopt?* Paper presented at the In DRUID Society Conference.

Views and opinions expressed in this article are the views and opinions of the author(s), Journal of Tourism Management Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.