

Tourism and Information Technology: Influence on Market Orientation and Visitor Experience Management

Priyanka Singh

Assistant Professor-Tourism (cb), RGSC, Banaras Hindu University, Varanasi

Abstract

Tourism is regarded as one of those few 'information intensive' fields which not only got affected by ever growing domain of information technology but also led the direction of some of the major innovations and transformations in the field of ICT. Progress in tourism industry largely observed to be in correspondence with the advancements of information technology, which further emphasize the significant role of information technology in impacting on this dynamic and global sector. New age tourism market is distinctly recognized for its niche segment, experience-orientation, customization and innovative production, driven by seamless, swift and ubiquitous tools of information technology. At the same, formation of rich, cohesive and quality visitor experience is essential pursuit of destination management strategies in order to sustain global competitiveness. Building upon this perspective present study focused on reviewing key trends evolved in tourism management in context of market orientation and visitor experience management induced by advancement of information technology.

Keywords: Information, Tourism, Technology, Market Orientation, Visitor Experience,

Introduction

As observed by Xiang (2017) 'our view of technology in relation to tourism management seems to have shifted' in the span of last decade. Technological advancement and innovations accomplished in the realm of information in past decade has brought such radical changes and paradigm shift in business sphere which were not even predicted in the early years of the 21st Century (Li et al., 2017). Physical market places which now transcended to virtual space have accelerated business transactions across the world. Tourism, being one of the leading global economic sectors and people-centric business largely viewed as 'information intensive' field where information lies at the core of demand and supply. Mass diffusion of information technology and resultant structural transformations led the requirement of tourism industry to re-define its fundamentals of business concepts and remodel the conventional business structure to incorporate newly emergent trends and opportunities.

Tourism scholars begun to acknowledge the role of technological advancement in tourism development since 1970s (Buhalis and Law, 2008; Poon, 1993) however it was only since late 1990s that technological innovations begun to create significant impacts in tourism sector and which specifically appeared most drastic since beginning of millennium year (Standing et al., 2014). Market orientation and visitor experience management which are the central concerns of contemporary destination management and marketing strategies is enormously influenced by constant progress and expansion of information and communication technology. Growing connectivity and widening knowledge of this era shifting the role of internet from a 'publishing platform to a platform for participation and networking' (Xiang, 2017) and emphasize on altering attribute of market and consumption in particular context of tourism business. In the view of this scenario, it is imperative to comprehend how information technology influencing market orientation in tourism sector.

Drawing upon three major stages of visitor experience i.e. i) pre-visit, ii) on-site and iii) post-visit, study also attempt to identify evolving trends in visitor management.

Information Technology and New Age Market Orientation

Introduction of internet and its subsequent mass adoption and usage triggered huge transition from the conventional media to the hypertext-based media, resulting in cognitive dissonance and behavioral challenges in business sphere (Li et al., 2017). Information has now become a central theme and strategic tool in tourism management and destination marketing. “How we look for and process information” has dramatically transformed (Xiang, 2017) and knowledge developed through information technology stimulated efforts to adjust/regulate market orientation towards new trends and demands. Terms such as ‘Digital destination’ ‘e-tourism’, ‘online travel agency’ and ‘social media marketing’ represents embracement of digital progress and incorporation of ‘knowledge-driven’ innovations of information technology in tourism sector. A paradigm shift in role of information technology (in past decade) has been noted from earlier being as a medium or tool to support tourism business and driven mainly by sector’s need (largely through world wide web, computer, mobile phone, email, laptop etc.) to now as a source of market orientation (largely driven by Wi Fi, search engines, social networking, sensors, smart phones, internet of things, wearable devices etc.) where ‘Big data’ dominates market trends. Data-driven approach is now utilized in tourism market to trace ‘digital footprints’ of tourist to develop their profile and accordingly design personalized marketing tactics (Pan and Li, 2011). Further, in order to succeed and achieve competitive advantages of market it become essential for the tourism destinations to enhance their ability to make efficient use of this multi-source information in marketing strategies (Cooper, 2006).

Recently the smart phones have gained a wider popularity in the tourism industry considering to its ease to carry anywhere and everywhere (Dahlberg et al., 2006). As a consequence of this increasingly growing ability to exchange and disseminate information there is a visible transformation in marketing structure and customer’s buying behavior. Previous literatures strongly approved the influence of newly introduced platforms for e-communication (like social network sites, web-blogs, discussion-forums, web-reviews etc.) has a great impact on customer’s intention to purchase tourism product and services (Selira and Mustafa, 2017).

Information Technology and Visitor Experience Management

Information is the key constituents of travel intention, destination choice, and travel experience and hence it is considered to be one of the most crucial elements of travel decision (McIntosh Goeldner, 1990). Revolutionary advancements in information and communication technology (ICT) has brought remarkable shift in all the stages of visitor experience cycle that primarily include four major phases, ‘inspiration, transaction, experience and reflection’ (Lagiewski and Kesgin, 2017).

Information search is the most prominent activity during *inspiration or pre-visit stage* that is seen fundamental in constituents of customer purchase behavior towards tourism goods and services (Buhalis Law, 2008; Chen, Hsu, Lin, 2010). It requires appropriate and accurate information about the products (Humborstad and Whitfield, 2007). The choice of destination is significantly influenced by the quality and accessibility of information to the customer. Intense proliferation of information-driven technology has created an evident impact on traveller’s awareness about existing destinations, vacation planning and travel preferences. Contemporary researches affirm that new generation tourists are making excessive use of information available in tremendous amount on internet to plan their travel

and people who book travel service online are inclined to maintain positive attitude to web sources (Morrison et al 2001). This segment is primarily dominated by younger tourists who have been called as the Net generation (Tapscott, 2009) and 'digital natives' for their intensely usage and dependence on internet-based network to consume travel services. The online social influence has affected tourist attitude towards destination marketing and created noticeable impact on their thinking capacity either to purchase or decline the tourism product based on their belief and evaluations (Bagozzi et.al., 1999).

On-site or experience stage represents the period of arrival and stay at the destination. It is a crucial stage as experience gained at this stage would determine feedback and loyalty of customer. Outset of virtual reality (VR) and augmented reality (AR) stimulated a new shift in how tourism attractions are being perceived. Destination developers are adapting these new 'gamifying and augmenting applications' to enhance visitor experience and engage them by providing dynamic and sensory information. Marasco (2018) claimed to virtual reality (VR) as a 'powerful tool' for marketing destinations in new generation hi-tech tourist market. Initially developed to provide a high end gaming experience and later adopted in entertainment business for enhancing the quality and experience these VR technology though yet at nascent stage in tourism marketing (Griffin et al., 2017) has anticipated to have tremendous potential in tourism field (Chen, Pan, Zhang, 2012; Pantano Corvello, 2014). The newest generation of VR devices, such as Oculus Rift and Samsung Gear, represent cutting-edge tools for destination marketing efforts by allowing the creation of highly immersive and realistic virtual experiences.

Post visit or reflection stage is where visitor shares their memory of travel experience with others. Introduction of Web 2.0 boosted virtual interactions of people by facilitating the emergence of social media platforms. This democratizes the Internet space as any tourist can publicize their travel experience at destination to virtually everyone, which eventually at certain extent eroded the oligopolistic role of destination management organizations (DMOs) and mainstream media outlets as suppliers of destination information (Hays et al., 2013). Some of the most popular social media platforms includes wikis (e.g. wikitravel) blogs (e.g. travel blog) micro blogs (e.g. twitter) social networks (e.g. facebook) media sharing sites (e.g. flickr, youtube) review sites (e.g. trip advisor) and voting sites (e.g. digg). These platforms serves as a tool of information exchange and are found in several researches on tourist perception more reliable as they are considered unbiased ((Blazevic et al., 2013, Selira, Mustafa, 2017) which further enhance vitality of these platforms from destination marketing perspective. Growing space of 'user generated' content on digital platform and visitor's increasing inclination to participate in content creation now influencing purchase behavior and expectation of visitors.

Conclusion

The ubiquity of digital screens in forms of mobile, computer laptop etc. has exponentially enhanced the communication and connectivity of new-age tourists. They are not only better informed and aware of the destinations but also fairly participate in marketing of destination. Therefore, managing visit experience can contribute in multi-facet way including destination publicity, promotion, customer loyalty and retention along with increase purchase. Destination management organization must adopt proactive steps to make strategic use of available information and can undertake popular social media platforms to stay visible and relevant in the virtual world (Hays et al., 2013). Revolving around this progressive information and communication setup, concept of 'digital destination' or 'smart destination' is emerging which fundamentally refers to a digital business ecosystem where technological infrastructure complement the service network by creating digital environment which

supports cooperation, knowledge sharing enhance visitor experience by providing personalized travel experience along with improving the quality of life for residents (Wang Li, 2013). Sensing, analyzing, and integrating information and knowledge can thus be considered a core aspect of upcoming digital cities or smart tourism destinations (Su, Li, Fu, 2011) and destination management

Reference:

- Bagozzi, R. P., Gopinath, M., Prashanth, U. N. (1999). The Role of Emotions In Marketing. *Journal of the Academy of Marketing Science*, 27(2), 184–206
- Blazevic, V., Hammedi, W., Garnefeld, I., Rust, R. T., Keiningham, T., Andreassen, T. W., Carl, W. (2013). Beyond traditional word of mouth: An expanded model of customer driven influence. *Journal of Service Management*, 24(3), 294–313.
- Buhalis, D., Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—state of e-Tourism research. *Tourism Management*, 29(4), 609–623
- Chen, S., Pan, Z., Zhang, M. (2012). A virtual informal learning system for cultural heritage. In Z. Pan, A. D. Cheek, W. Mueller, M. Chang, M. Zhang (Eds.). *Transactions on Edutainment VII* (pp. 180–187). Berlin Heidelberg: Springer International Publishing.
- Chen, Y. H., Hsu, I. C., Lin, C. C. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of Business Research*, 63, 1007–1014.
- Cooper, C. (2006). Knowledge Management and Tourism. *Annals of Tourism Research*, 33(1), 47–64.
- Dahlberg, T.N. Mallat, J. Ondrus, A., Zmijewska (2006). Mobile payment market and research past, present and future. In Presentation at Helsinki Mobility Roundtable. Helsinki, Finland, June 1–2.
- Gri• n, T., Giberson, J., Lee, S. H., Guttentag, D., Kandaurova, M., Sergueeva, K., Dimanche, F. (2017). *Virtual Reality and Implications for Destination Marketing*. http://scholarworks.umass.edu/ttra/2017/Academic_Papers_Oral/29.
- Hays, S., Page, S.J., Buhalis, D. (2013). Social Media as a Destination Marketing Tool: Its Use By National Tourism Organisations. *Current Issues in Tourism*, 16(3), 211–239.
- Humborstad, S., Humborstad, B., Whitfield, R. (2007). Burnout and Service Employees' Willingness to Deliver Quality Service. *Journal of Human Resources in Hospitality Tourism*, 7, 45–64
- Lagiewski, R. and Kesgin, M. (2017). Designing and Implementing Digital Visitor Experience in New York State: the case of the finger lakes interactive play. *Journal of Destination Marketing Management*, 6 (2) 118–126
- Li, S.C., Robinson, P., Oriad, A. (2017). Destination marketing: The use of technology since the millennium. *Journal of Destination Marketing Management* (2017), <http://dx.doi.org/10.1016/j.jdmm.2017.04.008>
- Marasco, A., Buonincontri, P., Niekerkb, M., Orlowskib, M., Okumu, F. (2018). Exploring the role of next-generation virtual technologies in destination marketing. *Journal of Destination Marketing Management*, <https://doi.org/10.1016/j.jdmm.2017.12.00>
- McIntosh, R.W. Goeldner, C.R. (1990). *Tourism: Principles, Practices, Philosophies* (6th ed.). New York: Wiley.
- Morrison, A.M., Jing, S., O'Leary, J.T., Cai, L.A. (2001) Predicting usage of the Internet for travel booking: An exploratory study. *Information Technology Tourism*, 4, 15–30

- Pan,B., Li,X. (2011).The long tail of destination image and online marketing. *Annals of Tourism Research*, 38(1), 132–152
- Pantano, E., Corvello, V. (2014).Tourists' acceptance of advanced technology-based innovations for promoting arts and culture. *International Journal of Technology Management*, 64(1), 3–16.
- Poon, A. (1993). *Tourism, Technology and Competitive Strategies*. CAB international
- Selira, K., Mustafa, I. (2017) Tourism destination marketing and information technology in Ghana. *Journal of Destination Marketing Management*,
<https://doi.org/10.1016/j.jdmm.2017.04.00>
- Standing, C., Tang-Taye, J. P., Boyer, M. (2014). The impact of the Internet in travel and tourism: A research review 2001–2010. *Journal of Travel Tourism Marketing*, 31(1), 82–113.
- Su, K., Li, J., Fu, H. (2011). Smart city and the applications. In Proceedings of the *International Conference On Electronics, Communications And Control (ICECC)* (pp. 1028–1031). Ningbo, China.
- Tapscott, D. (2009). *Grown up digital: How the Net generation changing your world*. New York: McGraw Hill.
- Wang, D., Li, X. R., Li, Y. (2013). China's “smart tourism destination” initiative: A taste of the service-dominant logic. *Journal of Destination Marketing Management*, 2(2), 59–61.
- Xiang, Z., (2017). Tourism Management Perspectives, From digitization to the age of acceleration: *Information Technology And Tourism*,
<https://doi.org/10.1016/j.tmp.2017.11.02>