

## Chapter 5

# Advantages of Augmented Reality, Virtual Reality, QR Code, Near Field Communication, Geo-Tagging, Geo-Fencing, and Geo-Targeting for Marketing Tourism

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### ABSTRACT

*The developing number of applications available through smart devices provides an increasing diversity of tourism marketing, destination and city marketing, tourism business marketing, and advertising. In the last decade, marketers have developed more creative practices to attract consumers. These new marketing tools are augmented reality, virtual reality, QR code, near field communication (NFC), geo-tagging, geo-fencing, and geo-targeting applications with the smart technologies, which are considered as a new marketing communication instruments these increase awareness and help get information about tourist and give information to the tourist. This chapter presents the profile of smart marketing applications and their marketing benefits in tourism industry. More specifically, this chapter aimed to achieve the following research objectives: to determine the potentials of the augmented reality, virtual reality, QR code, near field communication (NFC), geo-tagging, geo-fencing, and geo-targeting applications in the tourism industry.*

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## **INTRODUCTION**

Smart destinations are expected to enhance the quality of life of tourists by relying on new paradigms, like the Internet of Things (IoT) and its capacity to manage and interconnect thousands of sensors and actuators scattered across the city. At the same time, mobile devices wide assist skilled and private everyday activities. Smart destinations are complicated environments wherever many areas of innovation meet so as to substantially improve socioeconomic development and quality of life. Economic innovations, technological tools that encourage individuals to participate in governance processes and Internet-enabled city infrastructure services and utilities form a thriving analysis field (Chaves-Diequez et al, 2015). Benefits of integration the smart technologies into the destination strategy are cost reduction, efficiency, economic competitiveness, sustainability, quality of life, big data analyzing and innovation.

Today's customers are increasingly using social media on mobile phones, and PCs. With these technologies, customers easily notice what they need, compare with various items, get recommendations from friends, family, and colleagues purchase from wherever they're located, and tell their experiences to others subsequently. In today's internet and mobile-enabled world, customer expectations are being shaped by daily interactions with companies across varied industries. However, this transformation would require new ways of thinking about company culture, business processes, and technology investments, (Sharma and Sharma, 2014) marketing planning and marketing communication.

In the tourism destinations of the future interactions can inevitably be mediate through technology. Users can interact through public displays, mobile location-based applications, virtual reality, geo-fencing, geo-tagging, NFC, QR code and augmented reality systems. The destinations and tourism businesses of the future can have an increasing range of sensors that may track every aspect of the daily life. This immense data potential may be used to improve the urban living experience by enabling a smart city, not only from the perspective of its services, but also in the scope of marketing and planning activities.

Smart technologies are considered highly important for marketing in many industries; however, in the tourism industry there exist relatively few researches and articles despite the fact that tourism could very well benefit from the applications for these practices. More specifically, this chapter aimed to achieve the following research objectives; to determine the potentials of the augmented reality, virtual reality, QR code, near field communication (NFC), geo tagging, geo fencing and geo targeting applications in the tourism industry; to determine the benefits of augmented reality, virtual reality, QR code, near field communication (NFC), geo tagging, geo fencing and geo targeting applications from the perspective of marketing in tourism industry.

The study is organized as follows: Literature review about augmented reality, virtual reality, QR code, near field communication (NFC), geo-tagging, geo-fencing and geo targeting the advantages and challenges of applications are discussed. Finally, the findings and results are summarized in the last section. The implications of this study will be meaningful to both tourism researchers and professionals.

## **BACKGROUND**

### **Augmented Reality**

AR is the process of taking and integrating digital information with a live streaming video or with the user's actual, real time environment. The AR that is utilized by smart phones will utilize GPS technology

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