Chapter 38
Smart Technologies:
Augmented Reality Applications in Tourism Marketing

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ABSTRACT

The growing number of applications available through smart devices provides an increasing diversity of travel-related services like looking up menus for restaurants, finding directions, making reservations, marketing, advertising and using translations. In the last decade, marketers have developed more creative practices to attract consumers. One of these new marketing tools is augmented reality application with the smart technologies, which is considered as an advertising and new marketing communication instrument that increases awareness and helps get information. This chapter presents the profile of AR applications and marketing benefits in tourism industry.

INTRODUCTION

Technology in today's world has constantly been developing and even every other day a new technology is introduced to people. They are mostly new tools or applications that ease people's life and are mostly mobile, easy to use and multi-functional. Augmented reality is one of these technological advances that may be benefited in various areas.

Augmented reality (AR) is a type of technology in which computers generate images which are superimposed onto any surface to enhance the issue of concern. Augmented reality (AR) allows marketers to have a combination of the physical world and the digital world, which enables both users and brands to connect far before or during and after a product is purchased.

AR could as well be used as a new way of advertisement in any printed materials such as tourism catalogues, brochures, pamphlets, flyers and so on. This means that augmented reality may provide a better understanding of what the customer wants to buy, use or benefit from. It may be about accommodation, entertainment or even special events. Indeed, some services are underutilized in tourism and hospitality. In this sense, augmented reality systems may be utilized effectively as an extremely persuasive power and

may also provide advantageous opportunities to market services successfully (Yovcheva et al, 2012).

AR is 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. Therefore, the main purpose of the chapter is to provide an understanding of the qualities and potentials of AR as an advertising and marketing tool for the tourism industry.

More specifically, this chapter aimed to achieve the following research objectives:

- To determine the potentials of the AR applications in the tourism industry.
- To determine the benefits of AR applications with content analysis in the tourism industry from the perspective of marketing.

The study is organized as follows: In the first part, a literature review about AR and the advantages and challenges of AR applications are discussed. In the analysis section, a content analysis is made on augmented reality examples from the tourism industry. 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.

AUGMENTED REALITY

Smart phones and various other mobile applications have been widely used, which has provided new ways that allow the tourism industry to connect their visitors during their travels. Indeed, the wide use of smart phones has led to more and more mobile applications (apps) in consumer technology (Eden and Gretzel, 2012), and respectively AR has become one of the new advertising and marketing tools. AR had been used in many brands to appeal to customers and to improve customer commitment (Höllerer and Feiner, 2004).

With the help of AR, the users of smart phone and tablet computers point their built-in cameras on these devices at whatever object they want, which then generates a 3D video (Azuma, 1997; Linaza et al, 2012). This object may be a print advertisement or even a coffee cup at a well-known coffee shop. In other words, augmented reality allows businesses to combine the digital world with the real world. This extraordinary function is particularly appealing to younger tech-lovers who generally hesitate to use traditional advertising methods (Craig, 2013). AR, however, does not only look attractive to young population but also old population. This is well explained what ABI Research estimates about the market for augmented reality in the US: $350 million in 2014, which is much higher than $6 million in the US market in 2008 (Russell, 2012).

AR enables its users to take digital information such as a current photo and integrate it into a live stream video or into the real time, present environment of the user (Höllerer and Feiner, 2004; Craig, 2013; Berryman, 2012). The software developed for augmented reality is the source of all these possibilities. Smart phones with the AR will make use of GPS technology and the location of the users will be identified to determine the orientation of the device (Taylor, 2013).

Augmented reality (AR) applications are characterized as an overlay of computer graphics to the user's actual field of view (Haala and Böhm, 2003). In augmented reality technology, in very basic terms, reality and virtual world are enhanced or augmented, which assures the users experience the combination of both worlds (Carmigniani et al, 2011, www.vrs.org.uk., 2013).

By augmented reality, virtual images are generated by computers and these images could be superimposed onto physical objects in real time.

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