ABSTRACT

The rapid growth in the use of smart phones and respective mobile applications has created new ways for the tourism industry to market the services to customers. The growing use of smart phones is driving the mobile applications market to be one of the fastest growing media outlets in the history of consumer technology. Augmented reality, or AR, has become one of the new advertising and marketing tool. Many brands use AR to attract customers and to increase customer engagement. AR allows smart phone and tablet computer users to point their phone or tablet cameras at certain objects—be they print advertisement or even coffee cups—that trigger a 3D video. Augmented reality gives businesses opportunity to unexpectedly integrate the digital world with the real world. This chapter presents the profile of AR applications and AR advertisements in the tourism industry.

INTRODUCTION

Augmented reality (AR) defined as a form of technology where computer generated images superimposed onto objects as a form of enhancement. With AR, marketers can take the physical world and combine it with the digital world, giving both users and brands the ability to connect even further with a product before, during and after making a purchase.

This new breed of next-generation advertising could apply as well to tourism catalogues, brochures, pamphlets, flyers and any other type of paper-based promotion materials. Hotels, casinos, theme parks but also special events or virtual roller-coaster trips could come to life to provide a better sense and impression of what the customer is buying. In fact, AR systems can exert a tremendous persuasive power and provide a lucrative opportunity to market services successfully, which is still underutilized in the tourism and hospitality industry (Yovcheva, Buhalis, & Gatzidis, 2012).

Given the importance of AR in marketing practice in many sectors, it is surprising how few researches and articles conducted in the tourism
industry even though the industry would have many advantages in applying these practices. Therefore, the main purpose of the study is to provide an understanding of the qualities and potentials of AR as an advertising and marketing tool for the tourism industry.

More specifically, the study aimed to achieve the following research objectives:

- To determine the potentials of the augmented reality applications in the tourism industry.
- To determine the benefits of augmented reality advertisement in tourism marketing.

In this chapter, a literature review about augmented reality is given in the first section, which is followed by the advantages of augmented reality applications. Then, the case studies about AR advertisements are given along with their qualifications. In the last section, the findings and results of the study are summarized. The implications of this study will be meaningful to both tourism researchers and professionals.

AUGMENTED REALITY

The rapid growth in the use of smart phones and respective mobile applications has created new ways for the tourism industry to connect with their visitors while traveling. The growing use of smart phones is driving the mobile applications (apps) market to be one of the fastest growing media outlets in the history of consumer technology (Eden & Gretzel, 2012). Augmented reality, or AR, has become one of the new advertising and marketing tools. Many brands use AR to attract customers and to increase customer engagement (Höllerer & Feiner, 2004). AR allows smart phone and tablet computer users to point their phones’ or tablet’s cameras at certain objects (Azuma, 1997; Linaza et al, 2012) - be it a print advertisement or even a coffee cup or brochures /magazines - that trigger a 3D video. AR gives businesses opportunities to unexpectedly integrate the digital world with the real world, which appeals to younger tech-lovers who are usually skeptical of traditional advertising methods (Craig, 2013). However, AR does not only appeal to the young generation, but also the old generation, which explains why ABI Research estimates the market for augmented reality in the US will reach $350 million in 2014. That is up from only $6 million in 2008 (Russell, 2012).

AR is the process of taking and integrating digital information with a live streaming video or with the user’s actual, real time environment. This technology will take a current picture and will blend the new information into the image (Höllerer & Feiner, 2004; Craig, 2013; Berryman, 2012). The source of the AR is the software that was developed. The AR that is utilized by smart phones will utilize GPS technology and allow the users location to be pinpointed in order to determine the device orientation (Taylor, 2013). The basic goal of an AR system is to enhance the user’s perception of and interaction with the real world through supplementing the real world with 3D virtual objects that appear to coexist in the same space as the real world (Azuma et al., 2001).

AR applications are characterized as an overlay of computer graphics to the user’s actual field of view (Haala & Böhm, 2003). In AR 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; Russell, 2013). By AR, virtual images are generated by computers and these images could be superimposed onto physical objects in real time. In other words, virtual images are used to interact by the users in a smooth way (Billinghurst, 2002; Azuma, 1997).

An AR system basically has to accomplish three requirements. The first requirement is about