Chapter 5
QR Code Applications in Tourism

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ABSTRACT

With the development of technology, new innovative approaches emerge day by day. With the internet and mobile devices being used more actively, many applications provide great convenience to our lives. This situation has brought about many changes and developments when it is evaluated in terms of both businesses and consumers. Enterprises are using applications that will increase customer satisfaction and loyalty to be different from competitors, adopt in the market, interiorize a sustainable policy, and make more profit. Some technological applications will save customers time and increase satisfaction and loyalty in tourism enterprises and all other businesses. One of these applications is the use of QR codes.

INTRODUCTION

The impact of technology on our lives has led to improvement of innovative tools and applications designed to facilitate daily routines. Quick Response (QR) codes are a tool widely utilized to improve customer experience in service sector, especially in tourism. Innovative technologies have considerably changed human lives including travel experiences. In tourism sector, technological developments are being utilized in order to save time for customers and to increase satisfaction and loyalty. QR code, one of these applications, is utilized by several institutions in tourism sector.

Having been common in the 2000s, QR code has begun to be utilized in many areas across the globe. Although there had been some concerns that consumers’ interests in QR code wouldn’t be long, a reverse situation emerged: These codes have been utilized in several parts of lives such as our beverage, menu of restaurants, notifications of customer satisfaction/complaint etc. Moreover, the biggest QR code of the world has been made by utilizing trees in China and a hotel in Dubai has been designed as QR code. Consumers’ interests in these codes continue to increase. For this reason, these codes are being improved each passing day and widely used by customers.

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These codes are used in companies such as accommodation, transportation, food and beverage etc. and also museums so as to give information or make promotion. For instance, information about local history, culture, flora and fauna belonging to destination can be given through QR code and this is its usage with informative aim. Besides, QR codes can be utilized to display more information about national parks, zoos, museums, and also local tourist attractions and exhibitions in museums. Customers in destinations can scan QR code to buy tickets at coach or train stations and in this way these codes contribute to paperless ticket system avoiding long queues. Furthermore, the codes are used to give information about calories and recipes of foods in menu of restaurants, message boards in lobby, concierge table in hotels (Emek, 2012) or to make extra discount during happy hour in activities carried out inside the hotel (Landman, 2011). QR codes have been also integrated into boarding passes of airways. In this section, there are QR code and its practices in tourism sector and also its practice areas in tourism with examples. Moreover, the focus is on making QR codes one of parts of general experience belonging to consumers who visit a destination or a tourism company and how tourism sector use them in various ways.

BACKGROUND

The most significant point of QR code which has got involved in our lives due to latest developments in mobile technology is to accelerate information flow. Instead of memorizing or noting an advertisement, an information letter etc. which are seen in a newspaper, at a mall, in a shop or while walking on the street, this information can be immediately reached, recorded, and utilized at will thanks to an easy application in a smart phone and its camera. In these regards, QR code is regarded as one of the most effective visual factors to accelerate information flow in digital world.

QR code is defined as “pictural bridges which can be basically embedded in physical environment” (Coleman, 2011) and is an innovative extension of standard barcode (Bi, Feng, Liu, & Wang, 2008). In the year 1994, QR code was developed by a Japanese company named “Denso Wave” in order to follow vehicles in production process and perform an inventory in automobile industry (Cata, Patel, & Sakaguchi, 2013; Narayanan, 2012). Without demanding any charges or imposing restriction to generate codes, the company has permitted unlimited access across the globe. Therefore, QR code is widely utilized not only in its original country, Japan, but also in several countries (Kan, Teng, & Chou, 2009). Since codes can include so much information in them and attract consumers’ interest, they have begun to be utilized over time in many different areas from product tracking to entertainment or from marketing to interior product labelling (Shin et al., 2012).

As seen in Figure 1, the code is made of square black modules on a white background to code a text, URLs (Uniform Resource Locator) to reach web pages or other data.

QR code is similar to Universal Product Code (UPC) (Crompton, Lafrance, & Van ´t Hooft, 2012). Because of its lines and blanks, UPC is called 1D and QR codes are called 2D. 2D barcodes have been inclusively developed to code large amount of information in several applications. Universal Product Code (UPC) has a capacity for maximum 20-digit word. However, QR Code has a capacity for a few hundred times more information with a few dozens. QR code can handle numerical and alphabetic characters, Kanji, Kana, Hiragana, symbols, binary, and control codes. Up to 7,089 characters can be coded in one symbol. As seen in Figure 2, QR Codes can store so much data in the picture in them (Crompton et al., 2012; Finžgar & Trebar, 2011).