Chapter 6
Applying an Augmented Reality Tool to the Camino de Santiago in Portugal

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ABSTRACT

This chapter focuses on an Interactive Guide of the Portuguese Way of St. James (Camino de Santiago) created by using an Augmented Reality application. This application was developed specifically for the section of the Portuguese Route to Santiago that crosses the municipality of Barcelos (Northwest of Portugal). The Guide has the geo-information needed for the Pilgrim, in the passage by the municipality of Barcelos to Santiago, and can be accessed through a smartphone. The pilgrim will have at his or her disposal a set of interactive geo-information about Barcelos. At the level of interactivity with the user, each of these points of interest in the Guide will be signaled by a portrait done by a painter from Barcelos (monuments) and universal graphic icons (other geo-information).

INTRODUCTION

In global world where speed and availability of information are increasingly important values, new technologies play a key role. This scenario is due to the significant growth in the number of inventions that have emerged throughout our most recent history, from the invention of the telephone, radio, tele-
vision to the Internet. Information must become a global asset of rapid spread and low cost of access. Geographic information is a particular case that is worth studying.

The new trends present a perfect integration between geographic information and virtual reality. In its turn, the usage of Virtual Reality in tourism is also currently increasing (Butler, 2016; Graham, 2016). Presently, the usage of geographic information tools that use Virtual Reality have become more common, more specifically one of its variations - the Augmented Reality (Milgram et al., 1994; Azuma, 1997; Ajanki et al., 2010; Charara, 2016).

Tourism and its value chain, as well as the territories themselves, undergo constant changes as a result of the technological advances, some of them being perceived in real time. According to recent data from the World Tourism Organization (UNWTO, 2014), approximately 60% of current tourists consult and decide their holiday destinations through the Internet, of which around 40% make their reservations via the Internet. These facts lead us to conclude that an important change in the habits of the tourists has happened. Increasingly, travel agencies (intermediaries in the tourism value chain) are losing importance, since the tourist directly book their flight through the reservation center of an airline and their accommodation through the reservation center of any hotel chain. Thus, we are in a new era, the one that Manuel Castells (2002) calls “informationalism”, which in turn, originates to what he also calls a new form of capitalism, “informational capitalism.”

However, in a postmodern and transforming society, where technology and distance communication prevails, the concept of travel has also undergone transformations. Therefore, the journey began to be made by many from the Internet, in real time, often transcending geographical boundaries, social distances and the very concept of physical travel (Dennis & Urry, 2009).

Based on these assumptions, we chose to develop a research between 2010 and 2014 focused on the following objectives: to explore the topic of Augmented Reality and its importance in territorial marketing, promotion, dissemination and access to tourism; and create a guide for mobile devices. The latter is an interactive guide with Augmented Reality, which supports the pilgrim during his or her visit to the municipality of Barcelos.

The intention was to relate the tools and new technologies accessible to individuals and institutions with the availability, sharing and usage of tourism information. Also demonstrate how to promote a territory, using new technologies in a simple and objective way, trying to attract new tourists and new investments, and contributing to improve the quality of the visit. It’s a matter of integrating and making available to the citizen and institutions all the tourist information of a territory in an interactive and accessible way.

The selected territory corresponded to the municipality of Barcelos located in the Northwest of Continental Portugal. It’s a territory linked to the Jacobean Pilgrimages, from the beginnings of the Middle Ages. The Legend of the Rooster is the ultimate exponent of this secular connection. The Portuguese Way of Santiago crosses the municipality of Barcelos in a direction of south to north, in an extension of 32 kilometers. It is estimated that about 17,500 pilgrims pass through Barcelos every year, and in Holy Years they can exceed 25,000 pilgrims (Barcelos Tourist Office, 2014).

In order to reach the objectives considered, after collecting the data and the field work carried out including meetings with all stakeholders and agents of the territory, a Geographic Information System applied to municipal tourism planning and management was created and also an interactive guide on The Portuguese Way of Santiago in Barcelos.

This application was the first author application made in Portugal about the Portuguese Way of Santiago in Barcelos. Worldwide it was the second to be implemented, since in 2010 Banco Bilbao Viscaya sponsored and published a guide of the French Way of Santiago, during the last Holy Year.