Chapter 2
The Future Through QR Code:
A Case of Its Potential on a Digital Service

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ABSTRACT

The choice of this work arises from the interest in the topics of innovation and technology transfer in the context of launching new services to target people. The authors sought to integrate a technology that could bring more interest to a product/service, namely with the modern growth of mobile activities and apps. Among some options considered, they chose the QR code technology. With the help of a strategic plan, they evaluate whether there is a market and propensity for its widespread use in Portugal. Then, an interactive prototype of the supporting platform is presented for its validation with users. Most participants know the QR code and consider the idea interesting and promising. They even suggested add-ons such as more video functions and a greater variety of events and resources for combining. Given the challenges of modern society, the authors recognize its eventual application to real-time requests for sharing specialized information or resources in critical activities of areas such as health and tourism. Features such as augmented reality, security, and privacy are future issues to address.

INTRODUCTION

The widespread use of mobile devices and apps is boosting the market take-up of barcode scanning applications. The motivation behind this work is the interest in areas such as mobile computing, entrepre-

neurship, and innovation. After selecting the theme, as well as the technology to support the underlying service, we chose to apply QR code. QR means quick response, which is represented by a bar code. This designation stems from the ability of quick interpretation by mobile devices. Given the related potential and creativity, we decided to go ahead with a business idea. However, the focus of this work is on the presentation and validation of its prototype.

QR codes can have a great impact on customer satisfaction. Sharing information via QR influence people to engage in online exchanges and communities (Hossain, Zhou & Rahman, 2018). Their potential is driving organizations to implement technical approaches to business services. They have revolutionized online activities because of their usefulness and feasibility. QRs are considered as tools of communication that can be executed by customers to obtain information and/or benefit from real-time transactions. This is a strong medium to manage and innovate customer relationships.

Objectives

This work aims to approach a stage of development of a business idea underlying the future launch of a start-up company. This is a project related to the innovative offer of a product/ service, which culminates with the presentation of a prototype of a platform for sending messages in videos through QR code, called *Send & Surprise*.

In order to achieve this goal, we will analyze some of the topics that should guide prototyping according to the market, and that form the strategic plan of the project. This will give us the understanding and motivation to know if there are conditions for its adoption and use. Thus, this project culminates in the validation of the product/service through an interactive prototype.

ENTREPRENEURSHIP OF OPPORTUNITY

This idea has to do with the creation of opportunities, given the increasing use of wireless devices connected to the internet and the variety of associated applications. In opportunity entrepreneurship (discovery of a business opportunity), the entrepreneur is, above all, an expert observer. Always attentive to the needs and desires of the contemporary consumer, which include more intangible aspects (sensory, interactive, dynamic, informal).

Upon realizing the lack of a certain product, he decides to conceive and implement it. Identifying good opportunities is not a simple task and, therefore, it is noted that this profile has prior knowledge, even if not in-depth, about the market (Leite and Oliveira, 2007). On the other hand, Pessoa (2005) defines three types of entrepreneurs: corporate entrepreneur (intra-entrepreneur); start-up entrepreneur (creates new businesses/companies); and social entrepreneur (creates enterprises with a social mission).

Corporate entrepreneurship involves a process of identifying, developing and implementing new opportunities within the existing company. The start-up entrepreneur aims to give rise to a new business. He analyzes the scenario and, when faced with an opportunity, presents a new enterprise. His challenges are clear: supplying an existing demand, to which has not been given attention; seeking competitive differentials in an existing market; beating the competition; wining customers; and achieving the profitability and productivity necessary to maintain the enterprise.

Finally, another type of entrepreneur is the technological one. His profile is normally characterized by familiarity with the academic world, by a search for business opportunities in the digital and knowledge

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