Chapter 29
A Typology of Firms Regarding M-Commerce Adoption

Sonia San-Martín
University of Burgos, Spain

Nadia Jiménez
University of Burgos, Spain

ABSTRACT

Nowadays firms are actively considering the mobile phone as a means of marketing and should also analyze its potential as a means of selling. In this study, the authors present the survey results from a sample of 125 firms, in Spain. They outline four types of firms (innovators, followers, laggards and traditionalists) on the basis of factors that drive or inhibit this type of selling and the main variables from TOE (technological, organizational and environmental) framework. The authors also characterize those four types of firms according to their size, sector, experience and use of ICT marketing strategies. To the best of their knowledge, scarce studies have analyzed mobile selling in Spain and proposed an exhaustive characterization of mobile vendor firms and strategies. Both academic and managerial implications of interest are derived from this study.

INTRODUCTION

The mobile phone has differential characteristics, as opposed to other devices such as the computer (mobility, interactivity, ubiquity, localization and personalization), thus it should be seen as an appropriate instrument for firms to complement other types of commercial channels (Clarke, 2001, Tsai and Gururajan, 2005). Mobile selling (MS) involves an opportunity for firms to position their products or services in consumers' pockets anywhere and anytime (Riivari, 2005). Following Clarke (2001), Heng-Sheng and Gururajan (2005) and Lee et al. (2007), mobile selling involves the action of offering products or services through portable or mobile technologies that facilitate consumers to do their shopping in an ubiquitous way and anytime.

Literature on m-commerce has especially focused on its adoption by consumers (Agrebi y Jallais, 2015; Zhang et al., 2013; Chan y Chong, 2013; López-Catalán y San-Martín, 2013; Zarmpou et al., 2012), and

there are only a few that analyze the perspective of firms (San Martín et al., 2012; Gebauer y Shaw, 2004; Liang et al, 2007; Shankar, 2010). It is remarkable that research and practice of m-commerce by firms is still in preliminary stages of adoption (Kim et al., 2015), which involves a great challenge and a future of several marketing opportunities. In this sense, Tsalgatidou and Pitoura (2001) and Pierre-Majorique et al. (2004) find that firms that have adopted e-commerce are more prone to adopt m-commerce and use it as a complementary channel to offer additional value to its customers.

According to data from the National Interview about Information and Communication Technologies (ICT) and Electronic commerce by INE (2014), Internet adoption by Spanish firms is widespread (99.9%). On the contrary, if we only take into account mobile connections, the percentage of adoption is much lower (57.8%). 27% of Spanish companies use a software to analyze customer information for marketing purposes and e-commerce represents 16% of Spanish enterprises' sales (ONTSI, 2015). Spanish market offers great potential as it is in fact the first European country regarding the percentage of smartphone (Fundación Telefónica, 2015). According to this report, in Spain there are 23 millions of active users of mobile applications that perform 3.8 millions of daily downloads of mobile applications. In fact, there are more mobile telephone subscriptions (50.760.771) than population in Spain (46.5 millions of people) (ITU, 2015). Therefore, we think it is necessary to analyze the perspective and characteristics of firms facing the opportunities of the Spanish market for m-commerce and high penetration of mobile phones.

Obtaining descriptions of a firm typology and their motives and impediments for and against MS is a complex task. Nevertheless, this is a key theme in the literature on mobile marketing (Liang and Wei, 2004). As Shankar et al. (2010) recognize, the effects of the mobile phone on consumer activities are moderated by mobile consumer segments and by the enablers and inhibitors of mobile adoption.

In this situation, the *objective* of this paper is double: 1) to outline the situation regarding the possibility of MS, identifying a complete list of motives, benefits and impediments perceived by firms to adopt MS; 2) to describe types of firms that are more or less prone to MS in accordance with their perceived motives and impediments and with important internal and external variables to the firm in a more objective way. More concretely, we will describe the firms using TOE (Technology-Organization-Environment). Following TOE, we will analyze for each type of firms, their technological context (propensity to innovations and to new technologies), organizational context (managers support) and the environmental context (competitive pressure). As another important external variable, we will analyze the relational context (perceived customer value for the firm). We will use variables of different nature to characterize firms because in m-commerce we think it is necessary to contemplate both internal (TOE) and external (marketing) variables to the firm due to the personal nature of mobile devices, which prove ideal for engaging in marketing strategies. This is one of the first studies of which we are aware in Spain on types of firms basing on many different variables, which will contribute to literature by applying TOE variables to MS.

THEORETICAL BACKGROUND

Which Factors Drive or Impede Mobile Selling?

The main reason for firms to adopt MS would be the perception of benefits deriving from adopting it. There are several benefits deriving from the particularities of MS, as it is a convenient, rapid, and fully interactive means of communication, which has great potential for segmentation and for promoting

Related Content

Mobile Agent Protection for M-Commerce
S. Guan (2007). *Encyclopedia of Mobile Computing and Commerce (pp. 429-435).*
www.irma-international.org/chapter/mobile-agent-protection-commerce/17113

Throughput Analysis of IEEE 802.11 DCF with Modified Binary Exponential Backoff in Mobile Ad Hoc Networks
Rishipal Singhand D. K. Lobiyal (2010). *International Journal of Mobile Computing and Multimedia Communications (pp. 61-70).*
www.irma-international.org/article/throughput-analysis-ieee-802-dcf/46124

Security Framework for Mobile Agents-Based Applications
Raja Al-Jaljouliand Jemal H. Abawajy (2012). *Mobile Computing Techniques in Emerging Markets: Systems, Applications and Services (pp. 242-269).*
www.irma-international.org/chapter/security-framework-mobile-agents-based/62198

Design of an Adaptive Mobile Learning Management System
Hyungsung Park, Young Kyun Baekand David Gibson (2008). *Handbook of Research on User Interface Design and Evaluation for Mobile Technology (pp. 286-301).*
www.irma-international.org/chapter/design-adaptive-mobile-learning-management/21837

Mobile-Based Research Methods
S. Okazaki, A. Katsukuraand M. Nishiyama (2007). *Encyclopedia of Mobile Computing and Commerce (pp. 639-643).*
www.irma-international.org/chapter/mobile-based-research-methods/17149