

# Chapter 65

## Are Signals a Solution to Perceived Risk and Opportunism in Mobile Shopping? Gender Differences and Similarities

**Sonia San-Martín**  
*Universidad de Burgos, Spain*

### ABSTRACT

*There is usually a situation of information asymmetry in mobile shopping. According to signaling theory and applying it to a mobile commerce context, the authors propose a model with some cognitive and experiential quality signals from the vendor and the site that can reduce shopper perceived risk and fear of opportunism: vendor reputation, site design, personalized service, and personalized information. However, as some literature states that male and female behaviour is somewhat different, the authors analyze differences and similarities between men and women in those perceptions of signals, risk, and opportunism. The authors collected information from 447 mobile shoppers, and results show some gender differences, which involve implications for managers when segmenting their potential market of mobile shoppers by gender. Women are more sensitive to signals, whereas for men the reduction of risk is key to less perceived opportunism.*

### INTRODUCTION

Nowadays vendors face new challenges with the widespread use of new technologies, which is a new means of electronic shopping. Among those challenges, the mobile phone can be considered an extension of Internet to operate. The penetration of mobile phones is clearly increasing and allows many daily operations such as shopping. There are about 6 billions of mobile telephone subscriptions in the world and more than 90% of the population have access to mobile networks ITU (2013). The mobile

DOI: 10.4018/978-1-5225-2599-8.ch065

phone is the most used device in the world. According to data of Telecommunications Market Commission (TMC) in Spain, the number of electronic transactions in Spain reached a maximum at the end of 2012 (40 millions of operations in the fourth trimester), but data mainly refer to Internet. In the context of mobile commerce (m-commerce), a study of Google in Spain (Our Mobile Planet, 2012) emphasizes the importance of smartphones in the way consumers buy. 82% of Spanish consumers have searched for a product or service with a smartphone and it is decisive in the shopping decision (24% of smartphone users have bought with it). Forecasts about m-commerce are great and in 2013 it is expected a growth of 44% in comparison with 2012 (reaching 235.400 millions of dollars) (Gartner, 2013). In addition, a IAB Spain research study (2012) finds that 59% of the Internet users own a smartphone and that 8 out of 10 mobile users surf the Internet using their devices. For the purposes of this chapter, mobile shopping (m-shopping) refers to the activities of consumers who use wireless Internet service when shopping and purchasing using mobile phones (Ko et al., 2009).

Both e-commerce and m-commerce include advantages for shopping such as convenience, quick shopping, wide assortment of products, timetable flexibility or less stress while shopping (San-Martín & Camarero, 2008), but there are some differential advantages of mobile phones for consumers: ubiquity, personalization, mobility, localization and interactivity (Lee, 2005), which are key to the adoption of mobile phones to buy (Gillian & Drennan, 2005). Some of the impediments are also common to online and mobile shopping –e.g. lack of physical contact, greater transaction costs and technical problems- (San-Martín & Camarero, 2008), but there are others that are especially related to mobile channels, such as low size of the screens, lack of specific antivirus software for mobile phones and inadequate standardization of payment methods (San-Martín et al., 2013). There are also several firm benefits deriving from the particularities of m-shopping, as it is a convenient, rapid, and fully interactive means of communication, which has great potential for segmentation (San-Martín, 2013). Nevertheless, it represents an important challenge for firms, given that the development of this promising sales channel is still at an early stage.

When the consumer has to choose the most appropriate mobile vendor (m-vendor) to buy from (to establish the relationship with), a problem of information asymmetry may appear (Mishra et al., 1998; Kirmani & Rao, 2000; Singh & Sirdeshmukh, 2000). Due to a lack of information, the consumer has difficulties to distinguish the true quality of different products/services and the true behavior of vendor firms (Mishra et al., 1998; Pavlou et al., 2007) and has, therefore, fear of vendor opportunism. Opportunism is self-interest seeking and can manifest itself, in an active (e.g. lying) or a passive form (e.g. shirking) (Wathne & Heide, 2000). This information asymmetry is greater when consumers do not have information about the vendor and mobile shoppers (m-shoppers) feel there are lack of interaction and advice, lack of experience with this kind of shopping, impossibility to touch or try products and services, distrust when paying and transferring personal data with the mobile phone, lack of knowledge, too small mobile phone screens.

In order to reduce perception of risk and opportunism, there are different factors –signals- that vendors can use to facilitate shoppers the evaluation of products and services (Wathne & Heide, 2000). Signals can be defined as firm characteristic or cue that reveals information about product quality or firm behaviour and that offers firm costs or revenues as a hostage, bond, promise or commitment (Kirmani & Rao, 2000; Mishra et al., 1998). Signals sent to consumers are that such investments would not be worthwhile for a low-quality vendor that would not enjoy repeat purchases (Mishra et al., 1998). Signals can be a good solution to the perceived risk and opportunism problem in B2C relationships (Mishra et al., 1998; Singh & Sirdeshmukh, 2000). Although there are studies that analyze signals in the online and off-line context, there are few that analyze them in a m-shopping context (Yeh & Li, 2009). In this chapter, we

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/are-signals-a-solution-to-perceived-risk-and-opportunism-in-mobile-shopping/183346](http://www.igi-global.com/chapter/are-signals-a-solution-to-perceived-risk-and-opportunism-in-mobile-shopping/183346)

## Related Content

---

### Cyberinfrastructure, Cloud Computing, Science Gateways, Visualization, and Cyberinfrastructure Ease of Use

Craig A. Stewart, Richard Knepper, Matthew R. Link, Marlon Pierce, Eric Wernert and Nancy Wilkins-Diehr (2019). *Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics* (pp. 157-170).

[www.irma-international.org/chapter/cyberinfrastructure-cloud-computing-science-gateways-visualization-and-cyberinfrastructure-ease-of-use/214612](http://www.irma-international.org/chapter/cyberinfrastructure-cloud-computing-science-gateways-visualization-and-cyberinfrastructure-ease-of-use/214612)

### Mobile Edge Computing to Assist the Online Ideological and Political Education

Dan Wang and Jian Zhao (2022). *International Journal of Mobile Computing and Multimedia Communications* (pp. 1-11).

[www.irma-international.org/article/mobile-edge-computing-to-assist-the-online-ideological-and-political-education/293747](http://www.irma-international.org/article/mobile-edge-computing-to-assist-the-online-ideological-and-political-education/293747)

### Wearable Cameras

Alessio Drivet (2016). *Wearable Technology and Mobile Innovations for Next-Generation Education* (pp. 95-121).

[www.irma-international.org/chapter/wearable-cameras/149603](http://www.irma-international.org/chapter/wearable-cameras/149603)

### Vision Based Localization for Multiple Mobile Robots Using Low-cost Vision Sensor

Seokju Lee, Girma Tewolde, Jongil Lim and Jaerock Kwon (2016). *International Journal of Handheld Computing Research* (pp. 12-25).

[www.irma-international.org/article/vision-based-localization-for-multiple-mobile-robots-using-low-cost-vision-sensor/149869](http://www.irma-international.org/article/vision-based-localization-for-multiple-mobile-robots-using-low-cost-vision-sensor/149869)

### Wireless-Enabled Fashion: Overall Supply Chain Impacts and Differentiating Technologies

L.F. Pau (2019). *International Journal of Mobile Devices, Wearable Technology, and Flexible Electronics* (pp. 37-56).

[www.irma-international.org/article/wireless-enabled-fashion/268890](http://www.irma-international.org/article/wireless-enabled-fashion/268890)