

# Chapter 1

## The Effects of Consumption Values on the Use of Location-Based Services on Smartphones

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### ABSTRACT

*This project is designed to understand what factor drives consumers' behavioral intentions to use and to speak positively about mobile location-based services (LBS). A model was developed based on the Theory of Consumption Values (Sheth et al, 1991a, 1991b), positing the effects of five consumption values on such behavioral intentions. The five values are functional values exemplified by perceived usefulness and ease of use, social value, emotional value, epistemic value, and conditional value. Use behavior is also studied to reveal the learning process in the LBS context, i.e., consumers learn about their five values towards using LBS from their actual use. An online survey was conducted among 226 LBS users. The research model was tested by using SmartPLS. The authors found that consumers' consumption values significantly influenced their intentions to use LBS and to spread positive word-of-mouth about LBS. Use behavior was also shown to significantly predict the five consumption values at varying degrees. The chapter concludes with both theoretical and business implications of the findings.*

### INTRODUCTION

The rise of smartphones has brought significant changes to consumer behaviors, marketing strategies, and the overall business practices. The number of mobile phone users worldwide has exceeded 6 billion with smartphones representing over 30% of the new mobiles being activated in 2011 (Global

Mobile Statistics 2012, 2012). In fact, there are more mobile phones than computers in the world (Carmichael, 2012). Consumers rely heavily on smartphones for their daily tasks and carry their phones around with them constantly. About 77% of smartphone users look up information on their phones while shopping (Silva, Webber, & Groopman, 2012). The idea of owning a smartphone has shifted from being a luxury item to a necessity. Marketers are jumping on the bandwagon fueling

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the growth of mobile ads, which are predicted to double annually (Global Mobile Statistics 2012, 2012). In particular, search ads and location ads that are delivered to consumers on the run based on the context and location the consumers are in are predicted to deliver the highest revenue (Global Mobile Statistics 2012, 2012).

Welcome to the era of location-based services, one of the fastest growing forms of smart mobile media services (SMMS). According to O'Reilly and Duane (2010), SMMS is "providing mobile network subscribers with permission and subscription based, dynamically profiled, location, context and task specific, mobile Internet applications, content, products, services and transactions for Smart Mobile Media Devices (p. 197)." In particular, location-based services (LBS) are "services in which the location of a person or an object is used to shape or focus the application or service" (Duri et al., 2001, p. 20). Similarly, Bellavista et al (2008) stated that location-sensitive applications (apps.) and services that utilized geographical positioning information to provide value-added services to customers are LBS. LBS has been around for several years, but only recently it has become very popular due to the wide adoption of smartphone technologies. iPhones, Android, and other smartphones make LBS accessible at the consumers' fingertips. Coupled with the wide-spread smartphone adoption is the rising popularity of mobile phone apps; LBS has become an important SMMS app by marketers. Notable examples are YPmobile, Foursquare, Loopt, and Facebook Places; and the list of popular LBS will keep growing. Utilizing LBS, marketers know where their potential customers exactly are, and therefore can provide them location appropriate services, e.g., restaurants, bars, gas stations, and ATM's. Information related to the products and services provided in the right place at the right time will accelerate consumers' purchase intention, not to mention they also fundamentally change consumers' shopping experience and may foster customer loyalty (Carter, 2011).

## **STUDIES ON LOCATION-BASED SERVICES (LBS)**

A growing number of studies have focused on location-based or location-aware services (e.g., Barnes, 2003; Casal, 2004; Chen et al., 2006). As a seminal piece, Barnes (2003) examines the technologies, applications, and strategic issues associated with the commercialization of LBS. Since then, two areas of LBS research have been studied: technological infrastructures for LBS (Chen et al., 2006; Gu & Chen, 2005; Priggouris et al., 2008; Wu & Wu, 2006) and security and privacy issues associated with SMMS (Casal, 2004; Chen et al., 2008; Junglas et al., 2008; Xu, 2010). In the first area, for example, Gu and Chen (2005) proposed using technological service management for location-aware services with the goal of reducing network signaling and lowering cost. Moreover, keeping customers in mind, Zhang (2003) proposed a generic framework for delivering personalized and adaptive content to mobile users. The second area not only addresses users' increasing concerns of LBS on security and personal privacy, empirical studies are also conducted to reveal the influence of psychological factors, such as users' personality traits (Junglas et al., 2008) and locus of control (Xu, 2010), on their concerns.

While the research on SMMS is growing, few studies have focused on consumer adoption and use of LBS (Xu & Gupta, 2009; Zhou, 2010). Although currently LBS has reached only a fraction of the mobile phone users in the U.S., it is enjoying a double-digit growth rate (Anonymous, 2011). With the worldwide adoption of smartphones continuing to grow, LBS and other mobile services in the form of apps will have greater potential to impact economies and businesses (Sunil & Kumar, 2011). Indeed, many of the LBS are used to enhance consumers' buying or shopping experiences. Mobile apps in general, being accessible to users 24/7 at any location unlike stationary devices, can heighten consumer

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