What’s Around Me?  
Applying the Theory of Consumption Values to Understanding the Use of Location-Based Services (LBS) on Smart Phones

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ABSTRACT

Businesses are increasingly aware of the power of mobile location-based services (LBS) in their success. For consumers, there are abundant options available. To understand the driving factors of consumers’ behavioral intention to use LBS and speak positively about LBS, a model of examining personal values and their influences was developed in this study. The model centers around a set of consumers’ personal consumption values (Sheth et al., 1991a, 1991b), including 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 perceived values toward 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 intention to use LBS and spread positive word-of-mouth about LBS. Use behavior was also shown to significantly predict the consumption values. Both theoretical and business implications are discussed.

Keywords: Behavioral Intention, Consumption Values, Location-Based Services (LBS), Smart Phone Apps, Smart Mobile Media Services (SMMS), Use Behavior, Word-of-Mouth

INTRODUCTION

It’s the summer of 1980; cruising down Highway 1, a father is driving, a mother is in the passenger side, and the kids are yelling in the backseats: “we want ice cream.” The mother struggles with a gigantic map. With no town in sight, the mother squints her eyes feeling desperate. The kids get louder in the back yelling: “road trips are boring!” Finally, the mother breaks it down to the kids, “we don’t know anything about this place! Can’t you just be quiet?” The kids slouch down in the backseats rolling their eyes. Fast forward to a family road trip in summer 2013; a father is driving, a mother is checking email on her iPhone, and kids are busy texting and updating their Facebook status “Road trips are boring….” The kids yell out: “we want ice cream”: The mother switches in a flash from email to her YPMobile. She announces after a few seconds of searching that they are stopping at the Marble Slab Creamery in 5 miles

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for ice cream. It’s rated 5 stars on Yelp! And they have the best Rocky Road recommended by a reviewer. The kids rejoice. The family gets off to go for ice cream while one of the kids deftly “Checks-in” to the ice cream parlor on Facebook. The ice cream is indeed good. The mother puts a review on Yelp using her iPhone app. The kids “like” this place on Facebook and find that you get a free ice cream for 5 check-ins. “Let’s come back here on the way back!” proclaimed the kids.

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 smart phone technologies. iPhones, Android, and other smart phones make LBS accessible at the consumers’ fingertips. Coupled with the wide-spread smart phone adoption is the rising popularity of mobile phone technologies. iPhones, Android, and other smart phones make LBS accessible at the consumers’ fingertips. Coupled with the wide-spread smart phone adoption is the rising popularity of mobile phone apps; LBS has become an important SMMS app by marketers. Notable examples, in addition to YPmobile in the opening anecdote, are Foursquare, Loopt, and Facebook Places; and the list of popular LBS will keep growing. Utilizing LBS, marketers know where their potential customers are exactly, 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. 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 smart phones continuing to grow, LBS and other mobile services in the form of apps will have greater potential to impact economies and businesses (Gregory, Chidambaramanath, & 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