Identification of Factors Affecting Consumer Adoption of Sport-Related Mobile Applications: Development of a Conceptual Framework

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The rapid advancement of technology has had a significant impact on the way people live. The mobile phone industry, especially, has faced momentous changes fueled by the growth of the smartphone market. According to ComScore Market Research (2012), there are currently 116.5 million smartphone users in the United States alone. The increase in the number of smartphone users has led to the escalation of the mobile application service market. Global Industry Analysts (2011) released data supporting that the global mobile applications are forecast to reach 101.2 billion by the year of 2017. The Gartner Research Group (2012) reported that there would be more than six applications downloaded per person in the world and smartphone users would download a total of over 45.6 billion applications in 2012. The smartphone application service market has quickly become an emerging industry from a niche market by fulfilling the consumers’ wants and needs.

A mobile application is a type of software designed to run on an electronic, handheld device that performs specific tasks for personalized purposes. Unlike the traditional media marketplace, mobile communication technology can quickly penetrate into various consumer markets throughout the world (Liu, 2008). Some researchers pointed out that the mobile application market is becoming a critical aspect for marketers and consumers due to its unique advantages in the areas of mobility, ease of accessibility, and ubiquity (Sidell & Mayhew, 2003; Watson, Pitt, Berthon, and Zinkhan, 2002). These applications allow users to check on such information as news, weather, sports team ranking, map, education, banking, shopping, and travel. In particular, sport-related applications are one of the most popular categories in the marketplace. For example, ESPN ScoreCenter, MLB.com At Bat 12, and NFL Mobile applications deliver live scores from hundreds of leagues around the world. Today, sports fans are able to get their teams’ live information by interacting with personalized mobile applications at any time.

Nevertheless, the explosive growth of sport-related mobile application market comes with intensified competitions among product options and leading corporations. It is imperative to understanding the factors that influence consumer adoption of sport-related mobile applications in order to effectively design, produce, and promote the applications. Understanding the factors that affect consumer behaviors, the service process of sport-related mobile application can be improved. To date, studies on mobile applications have primarily been focused on the technology perspective, rather than the consumer standpoint (Ljungberg & Kristofferen, 2000). Questions on why consumers adopt certain sport-related applications and what consumers look for in a sport-related application have rarely been investigated. Adopting review of literature as the methodology of inquiry, the purpose of this study was to develop a framework to guide the study of factors that influence consumer adoption of sport-related mobile applications. As numerous researchers have provided supportive evidence on the relevance, importance, and significance of the Technology Acceptance Model (Igbaria, Zinatelli, Cragg, & Cavaye, 1997; O’cass & Fenich, 2003; Venkatesh & Davis, 2000), the current study has adopted this model as the primary theoretical basis for conceptual analyses. To further understand user adoption of sport-related mobile applications, a comprehensive search and analyses of related literature on technology adoption were conducted in this study. In particular, several researchers have attempted to develop a broad understanding on why users adopt new technologies, including PDAs (Carroll & Chrustakis, 2004; Liang, Xue, & Byrd, 2003), mobile phones (Danaher, Hardie, & Putsis Jr, 2001; Wirth, Von Pape, & Karnowski, 2008), Smartphones (Chen, Yen, & Chen, 2009; Park & Chen, 2007; A. Smith, 2011), web service (Agarwal & Karahanna, 2000; Calder, Malthouse, & Schädel, 2009; Moon & Kim, 2001), online shopping (Gefen, Karahanna, & Straub, 2003; Koufaris, 2002), mobile banking (Laforet & Li, 2005; Sulaiman, Jaafer, & Mohrezar, 2007), social media (Clavio, 2011; Clavio & Kian, 2010; Lenhart, Purcell, Smith, & Zickuhr, 2010; Qualman, 2010), fantasy sports (Dwyer, 2009; Kwak & McDaniel, 2011; R. Smith, 2007), and Internet sport consumption (Hur, Ko, & Valachich, 2007; Seo & Green, 2008). Synthesizing and conceptualizing the research findings directly related to the current study, six categories of determinants (Usefulness, Convenience, Entertainment, Innovativeness, Ubiquitousness, and Cost) were identified to be influential in predicting consumer adoption of sport-related mobile applications. Furthermore, a structural model
depicting the sequential relationships between the determinant factors and mobile application adoption behavior variables was conceptualized as a result of this study.

The findings of this study are expected to provide business managers and marketers with strategic directions for effectively promoting consumer adoption of sport-related mobile applications and meeting the specific needs and wants of consumers. From an academic standpoint, the developed framework can be adopted to conduct empirical investigations to verify the dimensionality of the identified determinants and specify the influences of these determinants on consumer adoptions of sport related mobile applications.