Chapter 6
Value-Based Analysis of Mobile Tagging

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ABSTRACT
Innovative use of the mobile medium in delivering customer value presents unprecedented opportunities for marketers. Various types of mobile applications have evolved to provide ubiquitous and instant customer service to capitalize on this opportunity. One application is mobile tagging, a mobile-based innovative tool for convergence marketing. The accumulated academic knowledge on mobile marketing lacks consumer-centric information about this phenomenon. This paper addresses this issue and contributes to the understanding of theoretical and practical issues related to the use of mobile tagging in consumer markets.

INTRODUCTION
Improvements in technology in both communication infrastructure and client devices provide new forms and environments for marketing where two terms “ubiquity” and “convergence” surface as the most important concepts. A single medium for reaching information is being overlooked and multiple environments where information is multiplied and conveniently reached are being sought through. Watson et al. (2002) defined this transformation as the emerging era of u-commerce, where u stands for ubiquitous, unique, universal, and unison. These developments gave birth to a new kind of consumer who acts on multiple channels with timeless needs. Wind and Mahajan (2002) used the metaphor of centaur of the Greek mythology to draw a profile for this new type of consumer constituency. “They are like centaurs, half human and half horse, running with the rapid feet of new technology, yet carrying the same ancient and unpredictable human heart” (Wind
& Mahajan, 2002, p. 65). Since marketing is about understanding, communicating with, and delivering value to the consumer constituency, marketers will have to adapt to this change and leverage ubiquitous networks to create a pervasive presence alongside their customers.

Based on its inherent characteristics, the mobile channel has emerged as the enabling medium for the u-commerce era. Consequently, academic circles have reached to a consensus on the significance of the impact of mobile technology on the universe of marketing (Balasubramanian et al., 2002; Barnes, 2002a; Mort & Drennan, 2002; Shugan, 2004; Steinbock, 2006; Sultan & Rohn, 2005; Watson et al., 2002). In order to widespread the effects of the mobile channel on marketing, numerous applications have been evolved. Prior academic research in mobile marketing have examined consumer side of various types of mobile applications including location-based services (Barnes, 2003a, 2003b; Kumar & Stokkeland, 2003; Rao & Minakakis, 2003), mobile games (Kleijnen, Ruyter, & Wetzels, 2004; Salo & Karjaluoto, 2007), mobile coupons (Kondo & Nakahara, 2007), text-messages (Rettie, Grandcolas, & Deakins, 2005), mobile multimedia services (Pagani, 2004), text-to-screen mobile marketing (Dolian, 2008), SMS voting (Becker, 2007), vehicular mobile commerce applications (Varshney, 2005), mobile TV (Bayartsaikhan et al., 2007), mobile banking (Laukkanen, 2005; Luarn & Lin, 2005), mobile payments (Chen, 2008; Ondrus & Pigneur, 2006), mobile tickets (Bauer et al., 2007) and wireless application protocol (Barnes, 2002b; Bertelè, Rangone, & Renga, 2002). One of the recently evolving mobile applications is mobile tagging, which is basically an application that links the real world with the digital world. The accumulated academic knowledge on mobile marketing lacks any consumer-centric information about this novel phenomenon. This paper aims to address this issue and contribute to the understanding of theoretical and practical issues related with the use of mobile tagging in consumer markets.

In particular, 1) the enabling technology will be defined, 2) a variety of applications that can be powered by mobile tagging will be presented, and 3) consumer-centric value propositions of mobile tagging phenomenon will be discussed.

**History and Definition**

Linking objects with their desired information sources through barcode scanning is not a new concept itself. Barcodes have been extensively used in inventory management and various retail settings. Recently, the advancement in image recognition technology gave way to barcode recognition and character recognition from mobile camera phones. Driven by the no-cost feature of barcode creation and wide availability of mobile phones with built-in cameras, a new type of barcode format has been created specifically for mobile marketing purposes. This is termed as a 2D barcode because of its matrix structure. There are many different formats for the technology and there is no global standard on the type of barcode format, however, QR Code and Datamatrix are currently the most widely used formats. These types of barcodes are popularized by the name “mobile barcodes” since their usage is most extensive with mobile devices. Japan has been first to use this technology in early 2000s as a way to connect the physical world with the virtual world by using mobile phones. Followed by its growing popularity in Far East and the advancements in mobile technology, European and US companies have recently displayed an increased attention into this phenomenon. Many global giants from various industries including Visa, Calvin Klein, Universal Pictures, and BMW, have incorporated mobile tags in their multimedia marketing campaigns.

Mobile tagging is the term used to describe the process of hyperlinking real world objects. Mobile tags allow users to reach digital content instantly and conveniently by scanning a mobile barcode with their mobile devices with built-in cameras. The content can be encoded in a mobile barcode