An Application of Web 3.0:
Positive WOM for Mobile Location-Based Apparel Shopping Services Usage

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　　Significance. Web 3.0 is defined as the next paradigm shift of the Internet taking the best of web 2.0, including rich Internet applications and social media, and bringing them to mobile Internet devices and digital signage. Web 3.0 trends include a shift to outernet, location-based experiences, and the use of voice recognition in search applications (Buscemi & Marks, 2010). Mobile location-based services (LBS) offer shoppers reward opportunities when they physically visit stores or scan certain items. For instance, the Macy's application sends customers exclusive offers every five minutes they spend in the store. As usage of m-Internet devices (i.e., tablets, smartphones) increases, many shoppers plan to use LBS (Indvik, 2010). In addition, many U.S. mobile owners either utilize LBS now or are considering using them in the future (Marketing Charts, 2012). Thus, antecedents of m-Internet users' positive word-of-mouth (WOM) behaviors regarding use of mobile LBS for apparel shopping were investigated because positive WOM is a dominant input into consumer decision-making and emerges as a highly trusted information resource (Ng, David, & Dagger, 2011). The purpose of this study was to examine (1) whether (a) economic orientation, (b) affinity to m-Internet devices, and (c) recreational orientation were related to conditional/ epistemic benefit, social self-concept benefit, emotional benefit, and functional benefit and (2) whether (a) conditional/ epistemic benefit, (b) social self-concept benefit, (c) emotional benefit, and (d) functional benefit were related to positive WOM behaviors (see Figure 1).

　　Conceptual Model. The model was developed based on the work of Konuş et al. (2008) and Mowen and Spears (1999). Konuş et al.'s multichannel decision-making framework posits that to maximize customer utility, customers assess several benefits that are affected by customer psychographic profile. Mowen and Spears' model includes three levels: cardinal traits (i.e., individual characteristics), central traits (i.e., meditating variables), and surface traits (i.e., specific behaviors). In the context of mobile LBS, cardinal traits were operationalized by three m-Internet user characteristics: economic orientation, affinity to m-Internet devices, and recreational orientation. Central traits were operationalized as: (a) conditional and epistemic benefit (e.g., "I would value the real time information and interaction that mobile LBS make possible."), (b) social self-concept benefit (e.g., "Using mobile LBS would make a good impression on other people."), (c) emotional benefit (e.g., "Using mobile LBS would make me want to use it."), and (d) functional benefit. Surface traits were operationalized as positive WOM behaviors relative to mobile LBS applications.

　　Method. Data were collected from U.S. female m-Internet users ($n = 901$) with the help of a marketing research company. Participants watched a YouTube video explaining the concept of mobile LBS for apparel shopping and then completed an online self-administered survey.

　　Participant Characteristics. Participants' ages ranged from 18 to 72 with 53.4% between 18 and 45 years of age. Additionally, 19.1% had experience with mobile LBS.

Results. Confirmatory factor analysis was used to test the convergent and discriminant validity and composite reliability of the set of measures. A structural analysis was conducted using the maximum likelihood estimation method. The model exhibited a good fit with the data (χ^2 = 1070.28 with 370 *df*, χ^2/df = 2.89, CFI = .97, NNFI = .97, IFI = .97, RMSEA = .046, and SRMR = .062). Regarding H1-H4, conditional and epistemic benefit (β = .45, *t* = 8.81, *p* < .001), social self-concept benefit (β = .12, *t* = 4.37, *p* < .001), emotional benefit (β = .24, *t* = 6.02, *p* < .001), and functional benefit (β = .14, *t* = 3.10, *p* < .01) were positively related to positive WOM. For H5, economic orientation was positively related to conditional and epistemic benefit (β = .13, *t* = 3.43, *p* < .001) and functional benefit (β = .08, *t* = 1.98, *p* < .05). For H6, affinity to m-Internet devices was positively related to conditional and epistemic benefit (β = .36, *t* = 9.62, *p* < .001), social self-concept benefit (β = .20, *t* = 5.46, *p* < .001), emotional benefit (β = .39, *t* = 10.41, *p* < .001), and functional benefit (β = .36, *t* = 9.35, *p* < .001). For H7, recreational orientation was related to conditional and epistemic benefit (β = .11, *t* = 3.04, *p* < .01), social self-concept benefit (β = .17, *t* = 4.44, *p* < .001), emotional benefit (β = .19, *t* = 5.13, *p* < .001), and functional benefit (β = .12, *t* = 3.24, *p* < .01).
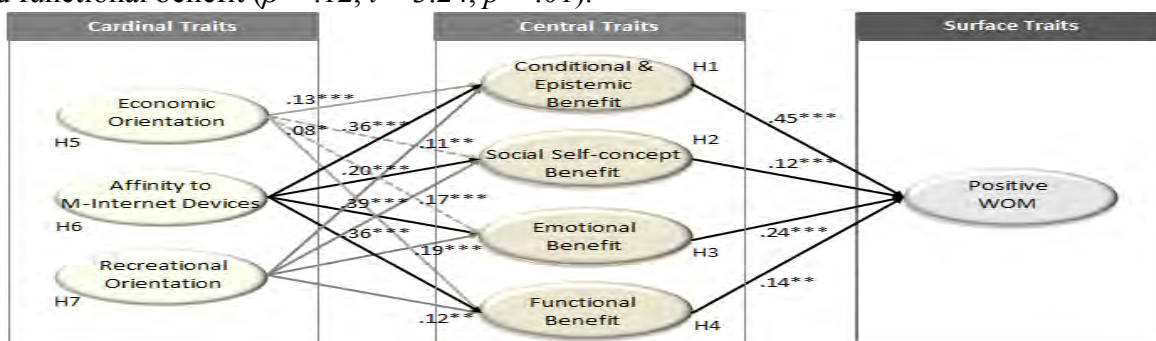

Figure 1. Final model

Conclusions and Implications. To satisfy m-Internet users' economic orientation as well as conditional (i.e., importance of real time information and interaction), epistemic (i.e., testing new technologies), and functional benefits, service providers can reinforce diverse real time special deals and redeemable rewards. To fulfill users' recreational orientation, social self-concept and emotional benefits, they can promote mobile LBS usage for apparel shopping by reinforcing user-generated reviews, user interactions, and video-sharing in social networks, and m-loyalty programs.

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