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Factors Influence Consumers' Purchase Intention of Smart Closets

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Selection of clothing is a daily routine but not an easy routine. People often experience difficulties in finding and matching clothing for the right occasion. Smart closets can address the issues of managing clothing inventory, finding the right matches, recommending appropriate styles, managing laundry, connecting with fashion vendors, and borrowing apparel via social network. However, little is known about how consumers perceive and respond to smart closets. Understanding the factors that influence consumers' willingness to purchase is important for design and implementation of smart closets. Therefore, the purpose of this study was to explore how various factors influence consumers purchase intention of smart closets.

Literature review. Theory of planned behaviour was used as a framework (Ajzen, 1991). Smart closets are virtual technologies and have both functional and aesthetic purposes. Therefore, a technology variable (fear of obsolescence), a functional variable (perceived performance), and an aesthetic variable (perceived aesthetics) were selected (Grewal, Gotlieb & Marmorstein, 1994; Hwang, 2014; Venkatesh & Brown, 2001). In addition, smart closets are a new phenomenon and unknown for most consumers. It is important to know whether smart closets are suitable for consumers' lives. Thus, a suitability variable (perceived compatibility) was also selected (Ko, Sung, & Yun, 2009). How these four variables, aesthetic attributes, functional performance, a general belief of technology, and an appropriate factor, influence purchase intention through three mediators, attitude, social pressure, and self-confidence, were examined.

**Method.** An online survey was conducted with 433 participants. All measures were adapted from previous studies. Each measure included three items, which were assessed by a seven-point Likert scale anchored by 1 (strongly disagree) and 7 (strongly agree). Structural equation modeling was used to examine casual relationships.

**Results.** The structural model had satisfactory levels of fit indices:  $\chi^2/df = 2.74$ ,  $\chi^2_{(215)} = 588.27$ , p < .0001, CFI = .95, TLI = .94, SRMR = .06, RMSEA = .06. The standardized coefficients of eight proposed paths were significant and two were insignificant (Figure 1).

The results indicated that aesthetics ( $\beta = .08$ ) was not related to attitude. Compatibility was the most important determinant of both attitude ( $\beta = .72$ ) and subjective norm ( $\beta = .65$ ). Performance played a significant secondary role in determining attitude ( $\beta = .18$ ) and the most important role in self-efficacy ( $\beta = .75$ ). Fear of obsolescence enhanced subjective norm ( $\beta = .31$ ) but impeded self-efficacy ( $\beta = .18$ ). Attitude was the primary determinant ( $\beta = .64$ ) and subjective norm ( $\beta = .32$ ) was the secondary determinant of purchase intention. Self-efficacy ( $\beta = -.06$ ) did not influence purchase intention.

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**Conclusion.** The findings indicated that aesthetics was insignificant, function was important, while the key determinant of purchase intention was compatibility via attitude and social influence. To create a positive attitude, function and compatibility should be improved. To enhance social influence, compatibility and technology rapidly changing played key roles. Consumers' confidence in using smart closets was increased as performance was higher, while decreased as technology was rapidly moving. The current study, for the first time, indicated that fear of obsolescence is not always an unfavourable condition. Although rapid changing technology impeded self-confidence in using smart closets, it also increased social influence, which in turn enhanced purchase intention. This study is the starting point of understanding how to develop smart closets that consumers are willing to purchase. Businesses may create more effective technology and marketing strategies based on the current study.

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