

## Who Seeks a Surprise Box? Predictors of Consumers' Fashion and Beauty Subscription-Based Online Services (SOS)

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*Introduction:* Subscription-based online services (SOS) refers to an e-business that provides periodic delivery of a customized box of merchandise directly to the consumer's home for a weekly/monthly subscription fee. Serving demands from modern consumers' "decision-fatigue", the SOS business has grown rapidly by generating \$5 billion revenue in 2014 (Mosendz & Bhasin, 2016). Beginning with fashion (e.g., Stitch fix) and beauty (e.g., Birchbox) products, the SOS business has expanded to a wide range of products, including meals (e.g., Blue Apron), childcare (e.g., Citrus Lane), and adult toys (e.g., Spicy Subscriptions) (Kane, 2014). Such growth of SOSs is significantly changing consumers' online consumption culture, by providing a shopping environment that has almost no traditional model of decision-making process and social interaction with others (Hölder & Svensson, 2016). What makes consumers use SOSs? Answering this question is important to understand the newly growing culture of subscription-based online shopping among consumers. Yet, almost no existing research has studied SOS and examined the factors that drive consumers to use SOS. As an initial attempt, this study investigated American consumers' current usage of fashion and beauty SOS, and examined the relationships between five predictors—consumers' age, gender, e-trust, fashion consciousness, exploratory product acquisition—and their usage of those SOSs.

*Literature & Hypotheses:* Though being very limited, the few previous studies on SOS suggested that young, female consumers who like to take risk and try something new were likely to be the target customers of most SOSs (Hölder & Svensson, 2016; Mimoun, Garnier, & Depled, 2015). Based on this suggestion, this study hypothesized that age ( $H_1$ ) and gender ( $H_2$ ) influence consumers' usage of fashion and beauty SOS. In addition, SOS presents an exploratory feature in that customers receive a box of merchandise curated by sellers, which includes items that they did not select voluntarily. In addition, SOS involves risks associated with online shopping, as customers prepay subscription fees online and receive products later. Lastly, most fashion and beauty SOS appeal to customers by consistently providing them with the latest fashion and beauty products. Based on these characteristics of fashion and beauty SOS, this study hypothesized that the following three variables that are related to each of those characteristics will also influence consumers' usage of SOS:  $H_3$ . *e-trust* (consumers' level of trust toward the e-commerce) (Ribbink et al., 2004),  $H_4$ . *fashion consciousness* (sensitivity toward the latest fashion) (Sproles & Kendall, 1986), and  $H_5$ . *exploratory products acquisition* (willingness to consider and choose unexperienced products with exploration) (Baumgartner & Steenkamp, 1996). Thus, the following five hypotheses were developed:

$H_1$ . Age influences whether consumers use fashion & beauty SOS.

$H_2$ . Gender influences whether consumers use fashion & beauty SOS.

*H<sub>3</sub>. E-Trust influences whether consumers use fashion & beauty SOS.*

*H<sub>4</sub>. Fashion Consciousness influences whether consumers use fashion & beauty SOS.*

*H<sub>5</sub>. Exploratory Products Acquisition influences whether consumers use fashion & beauty SOS.*

*Methodology & Results:* Upon IRB approval, data were collected among American consumers using a structured Mturk online survey. Each respondent received \$.60 incentive. The survey measured respondents' demographics, e-trust, fashion consciousness, exploratory acquisition of products, and shopping experiences of fashion and beauty SOS, adapting existing scales from the literature (Baumgartner & Steenkamp, 1996; Sproles & Kendall, 1986; Ribbink et al., 2004). Among 385 usable responses, for testing hypotheses, 112 respondents who have actually used fashion and beauty SOS at least once were grouped as "users". The remaining 273 respondents who have never used fashion and beauty SOS were grouped as "non-users". The respondents' age varied between 18-66 (mean = 33), and 60% was female. The ethnicity, income level, education, and state of residence of the respondents were normally distributed. Reliabilities of scales were acceptable, with Cronbach's  $\alpha$  values ranging from .78-.88.

Independent sample t-tests revealed that the user group presents significantly higher levels of e-trust ( $t=2.81, p=.01$ ) and fashion consciousness ( $t=5.83, p=.00$ ) compared to the non-user group, supporting H3 and H4. However, there were no significant differences by age ( $t=-.48, p=.63$ ) and exploratory acquisition of products ( $t=.24, p=.81$ ), rejecting H1 and H5. Chi-square analysis reported that the user group is more likely to be female ( $X^2=10.2, p=.01$ ), supporting H2. As a follow-up, logistic regression analysis was performed using only the significant predictors (i.e., gender, e-trust, and fashion consciousness) to develop a prediction model of consumers' usage of fashion and beauty SOS. The result indicated that when consumers are females having higher level of e-trust and fashion consciousness, the probability that they use fashion and beauty SOS were 88%, 46%, and 70% higher, respectively. Based on the coefficients, consumers' use of fashion and beauty SOS could be predicted as:

**Consumers' Fashion/Beauty SOS Use = .630<sub>Female</sub> + .381<sub>e-trust</sub> + .531<sub>Fashion Consciousness</sub>**

*Conclusions:* This study was one of the first studies that examined the predicting factors of American consumers' subscription-based online shopping for fashion and beauty products. Theoretically, this study provided an initial framework to the literature by revealing three significant predictors of consumers' fashion and beauty SOS. Starting from the current study, future studies may further test the suggested prediction model empirically and examine the other predictors that were not included in this study. This study also suggests managerial implications for fashion and beauty SOS businesses' customer relationship marketing. Based on our results, current and future fashion/beauty SOS businesses may focus their marketing inputs on female consumers, who have higher levels of e-trust and fashion consciousness.

*Key References* (Full Reference List Available Upon Request)

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