



Online Sizing: An Exploratory Study of True Fit® Technology Using Adapted TAM Model

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Key Words: True-Fit®, Sizing, TAM, E-commerce

Retail fashion is the fastest growing e-commerce sector with online apparel, footwear and accessories expenditures are forecast to grow by 39% over the next 4 years to reach \$96.41 billion in 2020. (Imperfect Fit, 2018). However, the retail industry is facing a serious issue in that one out of every three apparel purchases made online is returned (Dunn, 2015). This is staggering considering all the new technologies available online, it seems incredible that something as seemingly simple as the sizing and fit of clothing remains such a mystery and challenge (Gribbin, 2015). Retailers, are slowly but surely embracing new online tools to help consumers make smarter fit decisions. This current study is exploratory in nature and investigates the influence that online sizing technology, True Fit®, has on consumer confidence in their online sizing selection and its' eventual impact of usage of True Fit® while shopping online.

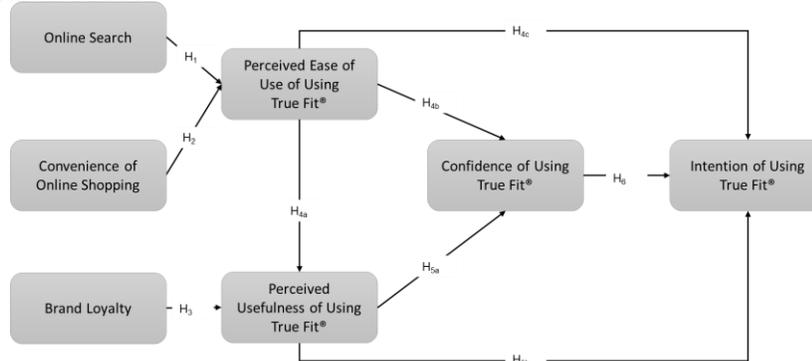
Rationale of The Study: With the growth of online retail and new technologies, slowly but surely customers are discovering 'fit' across the market and this evolution is leading to one simple, unique proposition: "*turning mass fashion into me fashion*" (Imperfect Fit, 2018). True Fit® is available on more than 200 global e-commerce sites and is composed of more than 55 million consumer users (Zackiewicz, 2018). True Fit® assists in finding the correct size across thousands of available brands by finding similarities in fit between past purchases and recommend sizes for future purchases based on these similarities (Gill, 2015; Schwaab, 2017). There is a paucity of research on the impact of online sizing tools and its impact on consumer behavior. Current studies have examined (1) In-Store Technologies, such as 3D body scanners (Lewis & Loker, 2017); (2) comprehensive review of academic publications in the field of apparel recommendation system (Guan, Qin, Ling, & Ding, 2016); and (3) 3D virtual models and its impact on consumer's purchase intention (Shim & Lee, 2011). The current study utilizes and adapted Technology Acceptance Model and examines: (1) impact of perceived ease of use (PEOU) and perceived usefulness (PU) of using True Fit® on confidence of using True Fit® technology (2) the impact of confidence of using True Fit® technology on intention to use True Fit®. (see Figure 1).

Methodology: Data was collected via an online survey at a university as well as friends and family of the researcher using a snowball sampling technique resulting in a sample size of 577. Data was analyzed using descriptive statistics, factor analysis and Structural Equation Modeling (SEM). The model was tested using measurement and structural model in SEM. The fit indices of the overall structural model ($\chi^2 = 1294.34.52$, $df = 547$, $p = 0.00000$, RMSEA: 0.049, NFI: 0.97, NNFI: 0.98) supported the model fit. Based on the parameter estimate t value which stated that a value greater than 2.00 is considered an indicator of statistical significance, all the hypotheses were supported except for influence of PEOU on intention to use True Fit®.

Conclusions and Implications:

1. Influence of convenience of online shopping and online search behavior positively influenced PEOU of True Fit® technology. This supports previous findings that indicate the customer's ability to navigate online searches. Furthermore, convenience of online shopping will positively influence perceived ease of use of this new technology especially since True Fit® allows decision customization thus lowering the search costs of customers and improving the overall quality of their purchase decisions (Haubl & Trifts, 2000).
2. Brand loyalty and PEOU positively influenced PU of True Fit® technology. As size and fit are important components of brand loyalty it can be inferred that customers who are loyal to a certain brand will be more likely find True Fit® useful. This is an important finding as retailers can target their loyal consumers to inspect True Fit® and its's capabilities as there is a greater chance of success. Additionally, as PEOU is the degree of ease felt by the consumer when utilizing technology to make a clothing size decision, it will impact PU which is the degree to which a consumer believes a new technology will enhance their size decision process.
3. PEOU and PU positively influences confidence in using True Fit® technology. For this research, achieving confidence in one's apparel sizing represents an approaching goal, related to positive outcomes, such as the correct size selected upon purchase (Flavián, Gurrea, & Orús, 2016). Hence, the result suggests that if the consumers find the technology easy to use as well as useful, then, the likelihood of them adopting this new tool will be higher.
4. Confidence of using True Fit® technology positively influences intention to use this technology, Additionally, PU positivity influences intention whereas PEOU does not influence intention. Thus, it can be inferred that consumers will embrace new technology based on the level of usefulness rather than if the technology is easy to use. However, they will use it if they consider the technology to be useful. This is an important finding for retailers as it can be inferred that for True Fit® to be adopted, usefulness of this tool is key for success.

Figure 1. Research Model



In conclusion, as online shopping technologies continue to impact how consumers shop online, it is imperative that retailers understand and embrace retail technology such as True Fit® if they want to stay current and continue to serve their consumer base.

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