



Enhancing Store Experience for Small to Medium Enterprises through Virtual Reality

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Background & Research Purpose: Virtual reality, which is a form of digital media, is an emerging technology that can replicate the real world by generating a three-dimensional, virtual interactive media environment (Steuer, 1992; Herz & Rauschnabel, 2019). The utilization of VR is diverse (Cognizant Reports, 2016). Walmart uses it to train employees and Genentech uses VR to train eye surgeons (Castellanos, 2019). In marketing, Volvo offers car test drives through VR (“10 best uses of virtual reality”, 2019). In retailing, VR can provide new shopping experiences. When shoppers wear VR headsets, they can enter a virtual space that mimics a physical world and experience a 3D view of the space. Shoppers can feel delighted with this new shopping experience. Coty, the licensing partner of fragrances by Tiffany & Co. and Calvin Klein, introduced a new fragrance-focused multi-sensorial VR experience (Sandler, 2018). An additional unique use of VR is exemplified by TopShop’s exclusive fashion runway show using a 360° video stream during the London Fashion Week (“10 best uses of virtual reality”, 2019).

Despite increased adoption of VR into apparel and fashion retailing activity, research into its effectiveness is limited. This paper focuses on VR application among small to medium enterprises (SMEs). As the growth of e-commerce resulted in fading of shopping offlines, attracting consumers to stores (Brakus, Schmitt, & Zarantonello, 2009) and providing unique shopping experience is critical. However, offering diverse shopping experiences is not easy for SMEs like small boutiques who have limited financial resources. This study posits that VR can be an effective mechanism for SMEs to provide a unique shopping experiences. The purpose of the study is to develop a conceptual model to 1) describe how VR can enhance consumers’ store awareness and visit intention among lesser-known independent retailers, and 2) identify factors impacting the effectiveness of VR use for these retailers.

Theoretical Background & Proposed Conceptual Model: A conceptual framework was developed using the Stimuli-Organism-Response (SOR) model (Mehrabian & Russell, 1974) and schema theory (Dahlén, Lange, Sjödin, & Törn, 2005; Kent & Allen, 1994) (Figure 1). This study expects that Stimuli (S), store familiarity, elicits enjoyment (O), which enhances store awareness and store visit intention (R). Schema theory explains that consumers formulate the meaning or opinions of brands with brand schemas which include brand experiences (Dahlén et al., 2005). Higher store (brand) familiarity could be formed from a stronger schema consisting of many previous experiences related to the store (brand) (Kent & Allen, 1994). This strongly formed schema is difficult to change with a single additional encounter. To the contrary, consumers’ weaker schema toward less familiar brands can be easily influenced by a single new encounter, such as a new experience (Klein, Falk, Esch, & Gloukhovtsev, 2016). Figure 1 shows the

proposed conceptual model and propositions. Just as other technology can provide shoppers with pleasure by evoking sensory and affective experience (e.g., Dennis, Brakus, Gupta, & Alamanos, 2014), so can VR produce excitement and fun when VR shopping (Lau & Lee, 2018). In particular, this study posits that consumers feel higher enjoyment when they virtually experience relatively less-known stores compared to familiar stores. Because their store schema is not firm, a new experience (i.e., VR) will alter impressions of the store image. Thus, *P1: Lower store familiarity provides higher enjoyment through VR store experience.*

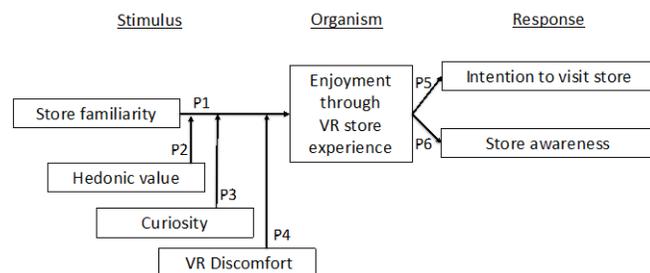


Figure 1. Proposed conceptual framework

relationship between store familiarity and shopping enjoyment through the VR store experience. Meanwhile, VR users reported discomfort with headsets, which can cause shoppers to experience unpleasant side effects (Kim, Rosenthal, & Zielinski, 2014). Thus, *P4: VR discomfort will negatively moderate the relationship between store familiarity and enjoyment of the VR store experience.*

Responses including visit intention and store awareness, may be increased by shopping enjoyment. Brand experience includes various activities, such as investigation and evaluation as well as consumption which can cause affective and sensory experiences (Brakus et al., 2009). Therefore, the positive feelings, such as pleasure, aroused by shopping experience and technology can have a positive effect on consumers' responses (Das & Varshneya, 2017; Dennis et al., 2014). Furthermore, enjoyment plays a significant role in influencing users' attitudes and behavioral intentions when accepting new and virtual technologies (Pantano, Rese, & Baier, 2017). Indeed, affective appraisal using VR could positively influence consumers' reactions (Lau & Lee, 2018). Thus, *P5: Enjoyment through VR experience enhances intention to visit store and P6: store awareness.*

Conclusion: The proposed conceptual model explored how the VR experience differed according to store familiarity. This offered a foundation for future research on VR use in SMEs because less familiar retailers are expected to evoke higher consumer enjoyment, visit intention, and brand awareness. The findings will provide significant, useful implications for SMEs as they can take greater advantage of VR to attract consumers than large companies whose images may not be easily altered. For practical applications, SME fashion stores' use of VR can effectively attract the greater number of consumers regardless of physical distance. SMEs can record and post 360° store videos using 360° camera to their website, in addition to 2D store images.

Consumers with VR headsets can watch the videos without visiting physical stores. Both the camera and VR headsets are inexpensive and widely available. The proposed framework contributes to extending SOR and schema theories to VR use and generating practical implications for lesser-known SMEs.

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