

Investigating Consumers' Intent to Shop at Metaverse: A Proposed Agenda

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Background: The term *Metaverse* is comprised of the prefix “meta” (implying go beyond) with the word “universe” to indicate the imaginary linkage between the physical world and the digital world (Lee et al., 2021). In the Metaverse, the users can interact with each other through digital avatars and this digital universe has been defined through extremely expanded concepts such as virtual collective space, lifelogging, embodied internet space, a venue of simulation, and collaboration (Lee et al., 2021; Suh & Prophet, 2018; Wohlgenannt et al., 2020).

Thus, this Metaverse creates the opportunity to relate consumers' increased demand for novel experiences aligned with retail business opportunities that established a presence in a 3D virtual world and can engage consumers in a new shopping experience (Domina et al., 2012).

Considering the user accessibility fact, it is assumed that by 2024, the global Metaverse revenue opportunity could reach \$800 billion (Bloomberg Intelligence, 2021; Soltes, 2022). Among many areas of the Metaverse, the development of the “virtual avatars” creates the opportunity for different brands to connect with the consumers and facilitate transactions in a unique way. The rise of the direct-to-avatar (DTA) commerce model facilitates the brands to sell digital products directly to the avatars in the Metaverse (Soltes, 2022). Decentraland's Metaverse fashion week involved range of fashion brands and designers that used various approaches for providing experiences to keep visitors engaged and shopping in their virtual stores. Ralph Lauren, a prominent luxury brand sold 100,000 units Inside Zepeto, a South Korean Metaverse, by offering digital apparel for avatars (Soltes, 2022). Thus, there are ample opportunities for selling digital goods inside the Metaverse. However, given the rudimentary status of research in this field, there is limited research conducted in this area. Especially, there are hardly any studies exploring the consumers' perspective and their intent to shop in such Metaverse platforms.

Therefore, the purpose of this study was to explore the recent status of the Metaverse from consumers' perspective and provide future directions in this area. More specifically, this study aimed at finding out (RQ): Why consumers would be interested in buying digital merchandise on Metaverse platforms?

Synthesis of the fact and literature: Technological advancements drive a shift in the approach of interaction between consumers and retailers resulting into consumers' engagement with retailers using such technology (e.g., metaverse). Subsequently, technology plays an important role in the shopping process (Burke 2002). Thus, to stay in the competition, retailers and brands can use these technological advancements as an opportunity to enhance consumer shopping experiences (Priporas et al., 2017). Immersive technology is described as the technology that simulates the five human senses (i.e., vision, hearing, touch, smell, and taste) aroused by the computer software and hardware in the virtual world to generate the experience of being or, the sense of presence in the virtual world (Shen et al., 2021; Suh & Prophet, 2018). Due to its wide array of future applications, this immersive technology drew the attention of both industry and academia. Especially in the gaming industry, immersive technology has been extensively applied through augmented reality (AR) and virtual reality (VR) (Shen et al., 2021). AR is an

interactive experience with a real-time display of computer-generated content (objects and environments), that happens in the physical world (Azuma, 1997). While VR is a computer-simulated, interactive, and immersive virtual world that isolates the user from the surrounding physical environment (Wohlgenannt et al., 2020) and can be experienced through using various immersion methods (headsets and tangible technology) to touch, feel, and move in a digital world (Suh & Prophet, 2018). Some empirical studies indicate that an immersive shopping experience can provide both hedonic (e.g., an enjoyable realistic shopping experience) and utilitarian values (e.g., efficient product search). These virtual world experiences lead to the origination of the Metaverse. But studies related to the Metaverse are limited (Narin, 2021). Thus, we propose to borrow concepts of consumer experiences and engagement research in the physical world and adopt them in the Metaverse context.

Findings: The physical world studies on consumer motivation to shop and buy are guided by several aspects. One of the main factors is consumers' decision-making styles, which is defined by Sproles and Kendall (1986), as "a mental orientation characterizing a consumer's approach to making choices" (p.268). Sproles and Kendall (1986), suggested the following eight characteristics: (1) perfectionism, high-quality consciousness; (2) brand consciousness; (3) novelty-apparel consciousness; (4) hedonistic, recreational shopping consciousness; (5) 'value for money' shopping consciousness; (6) impulsiveness; (7) confusion from over choice; and (8) habitual, brand-local orientation, as the important mental approaches of consumption denoting them as consumers styles inventory (CSI). Besides these, perceived enjoyment, perceived concentration, perceived control, consumer innovativeness, and perceived ease of use of technology, from the consumers' perspective can also serve as critical factors that might allow consumers to have a more persuasive and engaging shopping experience (Domina et al., 2012; Koufaris, 2002) in the Metaverse. These characteristics relate to and align with the Metaverse.

Proposal for future action: The Metaverse is the simulation of the real world, and it includes all the regions related to humans and society. Therefore, the Metaverse platform extends opportunities for researchers in all fields including consumer behavior. Metaverse can enable the consumers' hedonistic values, recreational shopping consciousness, and novelty-apparel consciousness via a perceived enjoyment of shopping. Several luxury brands have already launched their digital products on Metaverse. Based on real-world experience, brands can focus on these consumers' styles inventory (CSI) and further research on consumer engagement in Metaverse stores. As generation alfa is growing up in the Metaverse, and Gen Z was a digital native (Soltes, 2022), these tech-savvy generations are growing rapidly and more eager to get innovative and new shopping experiences (Kim et al., 2010). Thus, these consumers' habitual, brand-local orientation, perceived innovativeness, and perceived ease of use of technology can be the potential area for research. Furthermore, the Non-fungible tokens (NFTs) are digital assets with programmed scarcity and are recognized as an ideal tool to represent ownership of virtual assets which might allow the consumers to go for virtual consumption. Besides, the products in the Metaverse are digitally available, therefore, these assets are non-degradable and therefore the owner of these NFT-based products might create a marketplace for selling or renting their products in the metaverse through virtual currency. Furthermore, metaverse platform can be used in secondhand P2P platform (e.g., sharing economy) where the elements of metaverse can enhance consumers' ethical, social, and environmental values (Haque & Park-Poaps, 2022). To explain the consumers' intent to shop in Metaverse, theories such as the Flow theory and the Technology Acceptance Model (TAM) can be applied to enhance the consumers' engagement in the Metaverse and consequently shed some new prospects of Metaverse application in the broader area of the consumer science research. In summary, to examine the consumers' intent to shop on metaverse, we propose to use the above-mentioned theories

(i.e., Flow theory and TAM) and relationships among variables (i.e., consumer decision-making styles (CSI), consumers' hedonistic values, recreational shopping consciousness and novelty-apparel consciousness, perceived enjoyment, perceived innovativeness, perceived ease of use of technology, attitude toward NFTs, intent to shop on Metaverse), collect data on alpha and Gen Z consumers who shop on Metaverse, empirically test research models and provide theoretical and managerial implications to drive future research in this area.

References

- Azuma, R. T. (1997). A survey of augmented reality. *Presence: Teleoperators and Virtual Environments*, 6(4), 355–385. <https://doi.org/10.1162/pres.1997.6.4.355>
- Bloomberg Intelligence. (2021, December 1). *Metaverse may be \$800 billion market, next tech platform*. Bloomberg. Retrieved March 26, 2022, from <https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/>
- Burke, R. R. (2002). Technology and the customer interface: What consumers want in the physical and virtual store. *Journal of the Academy of Marketing Science*, 30(4), 411–432. <https://doi.org/10.1177/009207002236914>
- Domina, T., Lee, S. E., & MacGillivray, M. (2012). Understanding factors affecting consumer intention to shop in a virtual world. *Journal of Retailing and Consumer Services*, 19(6), 613–620. <https://doi.org/10.1016/j.jretconser.2012.08.001>
- Haque, F., & Park-Poaps, H. (2022). Consumers' Evaluation of Sustainable Industrial Practices in the Textiles and Apparel Industry. *Breaking Boundaries*. <https://doi.org/10.31274/itaa.13739>
- Kim, H., Fiore, A.M., Niehm, L.S. and Jeong, M. (2010). Psychographic characteristics affecting behavioral intentions towards pop-up retail, *International Journal of Retail & Distribution Management*, 38(2), 133–154. <https://doi.org/10.1108/09590551011020138>
- Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205–223. <https://doi.org/10.1287/isre.13.2.205.83>
- Narin, N.G. (2021). A Content Analysis of the Metaverse Articles. *Journal of Metaverse*, 1(1), 17–24. Retrieved from <https://dergipark.org.tr/en/pub/jmv/issue/67581/1051382>
- Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374–381. <https://doi.org/10.1016/j.chb.2017.01.058>
- Shen, B., Tan, W., Guo, J., Zhao, L., & Qin, P. (2021). How to promote user purchase in metaverse? A systematic literature review on consumer behavior research and virtual commerce application design. *Applied Sciences*, 11(23), 11087. <https://doi.org/10.3390/app112311087>
- Soltes, F. (2022, February 10). *Retail and the metaverse: The time is right for exploration*. NRF. Retrieved March 25, 2022, from <https://nrf.com/blog/retail-and-metaverse-time-right-exploration>
- Sprotles, G. B., & Kendall, E. L. (1986). A methodology for profiling consumers' Decision-Making styles. *Journal of Consumer Affairs*, 20(2), 267–279. <https://doi.org/10.1111/j.1745-6606.1986.tb00382.x>
- Suh, A., & Prophet, J. (2018). The state of immersive technology research: A literature analysis. *Computers in Human Behavior*, 86, 77–90. <https://doi.org/10.1016/j.chb.2018.04.019>