



Effect Of Ai Virtual Try On Technology On Customer Purchase Intent And Buying Experience

Authors - ¹Nandini Dixit, MBA Scholar, Bharati Vidyapeeth (Deemed to be University)

Institute of Management & Research, New Delhi

²Prerna Verma, MBA Scholar, Bharati Vidyapeeth (Deemed to be University)

Institute of Management & Research, New Delhi

³Vansh Dahiya, MBA Scholar, Bharati Vidyapeeth (Deemed to be University)

Institute of Management & Research, New Delhi

⁴Yash, MBA Scholar, Bharati Vidyapeeth (Deemed to be University)

Institute of Management & Research, New Delhi

⁵Ashish Gupta, MBA Scholar, Bharati Vidyapeeth (Deemed to be University)

Institute of Management & Research, New Delhi

Abstract: This study examines the impact of AI-powered Virtual Try-On (VTO) technologies on consumer purchasing intent and behaviour across the fashion and beauty industry. As online shopping becomes increasingly experiential, AI VTO tools offer personalized, interactive, and immersive experiences that reduce product uncertainty and enhance engagement. The research highlights key influencing factors such as perceived usefulness, enjoyment, body esteem, fit confidence, and self-congruity. While AI VTO improves consumer trust and purchase likelihood, barriers like privacy concerns and perceived intrusiveness remain. As AI continues to improve VTO features, its ability to deliver immersive, inclusive, and confidence-boosting shopping experiences will be pivotal in influencing consumer behaviour and driving e-commerce growth. Overall, AI-driven VTO plays a dual role enhancing both utility and emotional value reshaping how consumers explore and evaluate products in digital environments.

Keywords: AI Virtual Try-On (AI VTO), Consumer purchase intent, online shopping behaviour, Self- congruity, augmented reality (AR), buying experience

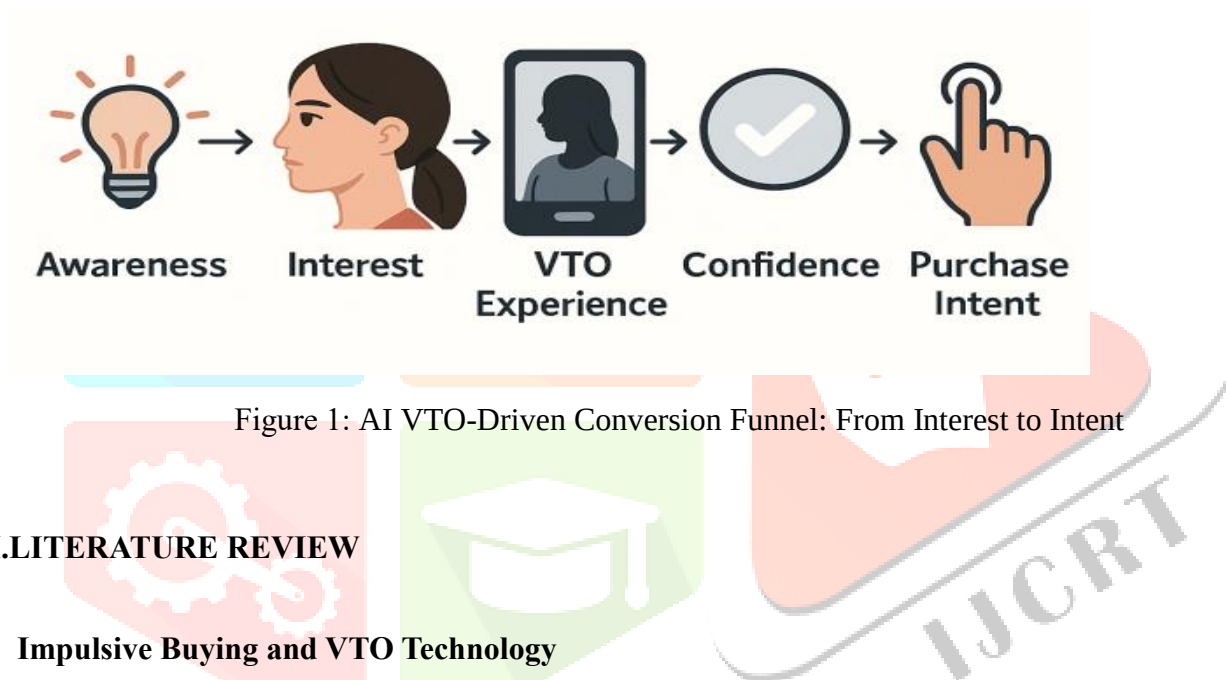
1.INTRODUCTION

The rapid evolution of digital technology has transformed the way consumers interact with products and make purchasing decisions. One of the most disruptive innovations in e-commerce is **Virtual Try-On (VTO) technology**, which leverages **augmented reality (AR)** and **artificial intelligence (AI)** to simulate real-time, interactive product trials. VTO enables consumers to visualize how a product—such

as clothing, cosmetics, or accessories—might look on their body or face without physical contact, thereby replicating the sensory and psychological cues of in-store experiences in an online setting.

The rapidly evolving competitive retail sector has made customer experience along with personalized offerings into essential competitive factors. The solution provided by VTO reduces uncertainty helps users become more engaged and allows them to make better decisions. Virtual trial experiences generate increased customer happiness and drive behavioural change along with purchase intent and spontaneous purchasing behaviour (Xin Song 1, 2024,) (Liang, 2025,). Some virtual shopping experiences provide dual benefits of hedonic emotional satisfaction together with utilitarian functionality which leads consumers to view digital shopping as more valuable (Anna Watson, 2018) (Jiyeon Kim).

The research investigates how Virtual Try-On technology shapes customer buying experiences and purchase intent through the evaluation of customer experience and perceived ease of use and impulsive buying and purchase intent. Digital decision-making in online shopping receives analysis regarding user attitudes and interactive features of VTO in this research.



II. LITERATURE REVIEW

Impulsive Buying and VTO Technology

The practice of impulsive buying depends on uncontrolled spontaneous purchases that happen due to emotional or environmental influences. AI-powered and augmented reality-based Virtual Try-On (VTO) technologies increase these triggers through immersive interactions that create real-time Try-On experiences.

(Liang, 2025,) studies consumer behaviour regarding AI-powered VTO technology to discover its direct correlation with increased impulse purchases based on VR try-on immersion. Key drivers include visual vividness, personalized configuration, and interactive control, all of which enhance both hedonic and utilitarian values of the shopping experience.

Similarly, (TASIN ISLAM, 2024) highlight that VTO systems, particularly those based on deep learning and GANs, simulate near-physical product trials, encouraging spontaneous buying behaviour by reducing decision uncertainty and creating emotional resonance.

(Anna Watson, 2018) add that experiential AR applications positively impact affective responses, which in turn increase purchase intent, especially in hedonic shopping contexts.

Customer Experience with VTO

Customer experience (CX) is a holistic perception shaped by all interactions a consumer has with a brand. VTO technologies enhance CX by simulating real-life try-on processes and boosting user satisfaction.

(Xin Song 1, 2024,) emphasize that AI-driven VTO tools refine the luxury shopping experience by providing personalized, realistic virtual product engagement, leading to greater customer satisfaction and engagement.

(Tingting Zhang, 7 July 2019) highlight that VTO enhances customer attitudes and experiences by improving perceived usefulness, enjoyment, and privacy management. Their study confirms that hedonic and utilitarian benefits are essential for a positive CX.

(Jiyeon Kim) found that sensory-enabling technologies like VTO improve customer enjoyment and reduce perceived product risk, creating a richer and more satisfying online shopping experience.

Perceived Ease of Use (PEOU) of VTO

PEOU determines how well someone perceives using a VTO system. The belief of a user regarding the absence of effort when using a particular system defines PEOU. The Technology Acceptance Model identifies PEOU as one of its critical constructs

(Wahyono, May 2024,) found that VTO's integration with AI and AR makes the feature intuitive and appealing. Their SEM-PLS analysis shows that perceived ease of use significantly influences both e-WOM and purchase intention in Indonesian e-commerce.

(Tingting Zhang, 7 July 2019) support this by demonstrating that PEOU directly impacts perceived usefulness and attitudes toward adoption. Simpler VTO interfaces led to higher consumer engagement across age and gender groups.

(Gubiniova, 2025) focus on Gen Z and show that VTO adoption is significantly influenced by ease of navigation, real-time responsiveness, and visual intuitiveness. These usability elements reduce friction and foster habitual use

Purchase Intent and VTO

Purchase intent is the likelihood that a consumer will buy a product. VTO positively affects this by increasing confidence, reducing uncertainty, and offering immersive experiences.

(Caixia Chen 1, . 2024,) conducted a systematic review and found that VTO improves purchase intent via emotional gratification, utilitarian benefits, and media richness.

(Hyunwoo Hwangbo, 2018) observed a 14,000 KRW average increase in customer purchases and a 27% drop-in return rates after VTO adoption, indicating greater purchase confidence and intent.

(Anna Watson, 2018) confirm that AR-powered try-on boosts affective responses, which mediate higher purchase intent. They argue this effect is strongest among consumers with high hedonic shopping motivation

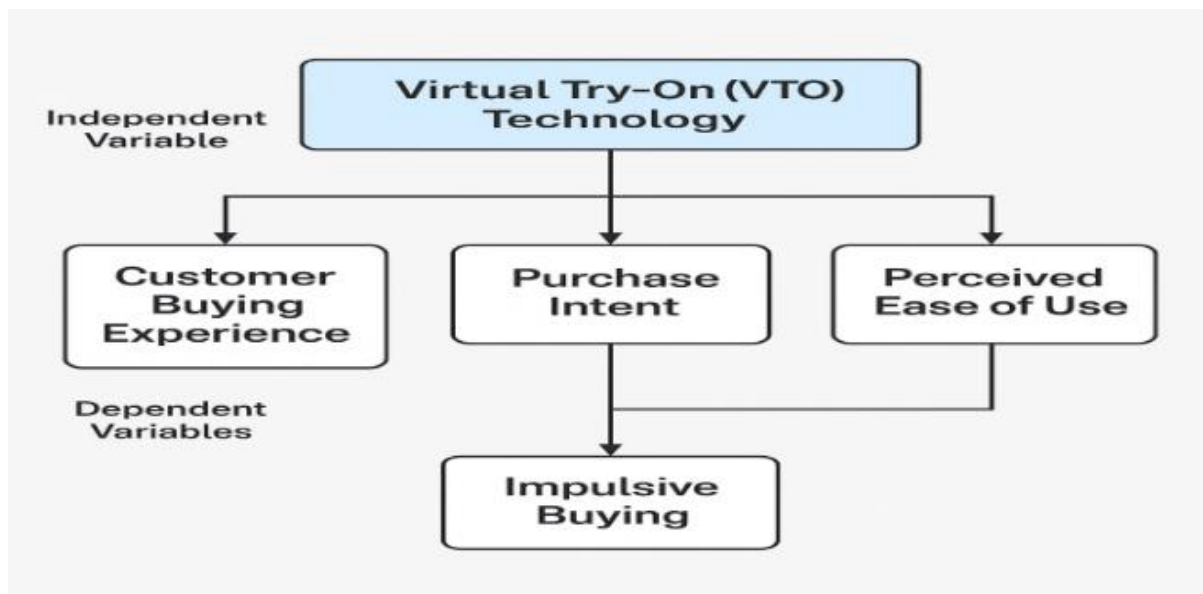


Figure 2:

Model Depicting the Relationship between AI VTO Technology and Consumer Purchase Behaviour

III.HYPOTHESIS

H1: Online consumer attitude toward VTO technology positively influences purchase intent.

Consumer attitude plays a central role in shaping online purchase behaviour, especially when interacting with immersive technologies like Virtual Try-On (VTO). Positive perceptions of VTO—driven by factors such as visual realism, personalization, and system responsiveness—can directly enhance purchase intent. According to (Caixia Chen 1, . 2024,), users who view VTO features as beneficial are more likely to follow through with purchases due to increased product evaluation confidence and engagement. Additionally, (Hyunwoo Hwangbo, 2018) demonstrate that the integration of 3D virtual try-on features significantly boosts average customer spend and reduces return rates, suggesting stronger purchase intent linked to favourable user attitudes. Moreover, (Tingting Zhang, 7 July 2019) found that a customer's overall attitude toward VTO—mediated by perceived enjoyment and usefulness—significantly contributes to their intention to purchase products online.

H2: Interactive control in VTO positively impacts impulsive buying behaviour.

Interactive control refers to a user's ability to manipulate and engage with virtual elements—such as rotating, zooming, or virtually “wearing” an item—within a digital environment. Enhanced control increases sensory immersion and emotional involvement, which are critical triggers for impulsive buying. (Liang, 2025,) Identified interactive control as a key attribute of AI-powered VTO that significantly increases impulsive purchase intentions, especially through perceived immersion and hedonic value. Similarly, (TASIN ISLAM, 2024) emphasize that technologies allowing personalized and interactive exploration of fashion items stimulate spontaneous purchase behaviour, bypassing the usual cognitive evaluation processes.

H3: Perceived ease of use of VTO positively influences purchase intent.

People who perceive VTO as effortless to use tend to decide to purchase it. As one of the fundamental components within the Technology Acceptance Model PEOU describes how customers view the ease of using VTO systems. A user-friendly and intuitive system encourages prolonged engagement and builds trust, which ultimately affects the likelihood of making a purchase. (Wahyono, May 2024,) found that PEOU has a significant effect on both electronic word-of-mouth (e-WOM) and purchase intent in e-commerce environments. (Tingting Zhang, 7 July 2019) also support this, indicating that higher ease of use enhances perceived usefulness and attitudes toward using VTO, leading to stronger intent to buy.

The simplicity and ability of VTO interfaces to respond quickly serve as critical elements for Gen Z users to adopt new technologies and make purchasing decisions according to (Gubiniova, 2025).

IV.METHODOLOGY

The researchers utilized descriptive primary research through structured questionnaires to analyze VTO technology effects on customer purchase behaviour and shopping experiences. Participants received the survey through social media networks as they were asked to watch a brief demonstration of Virtual Try-On before responding to the questions. 75 participants completed the valid survey.

Participants were primarily from the age group of **18–25 years (70%)**, followed by **26–35 years (23%)**, with the remaining spread across older age groups. The gender split was **55% male** and **45% female**. The questionnaire included Likert scale questions covering constructs such as customer experience, purchase intent, perceived ease of use, and impulsive buying in relation to VTO.

V.FINDINGS

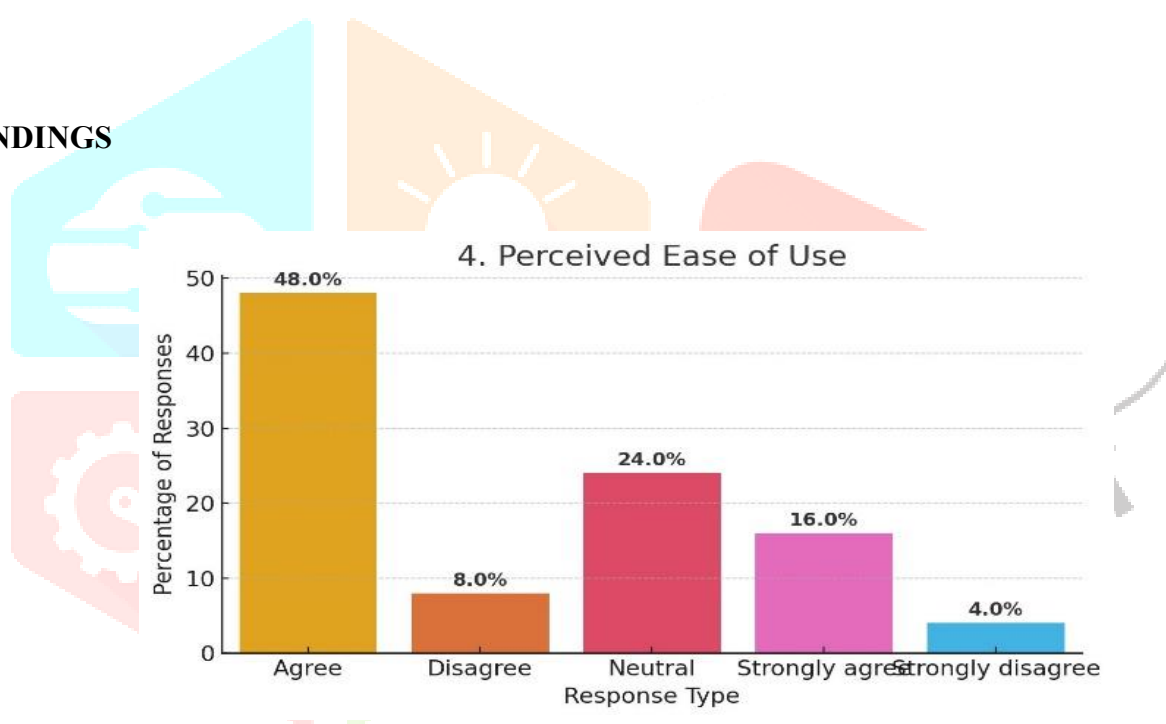


Figure 3 : Percieved ease of use

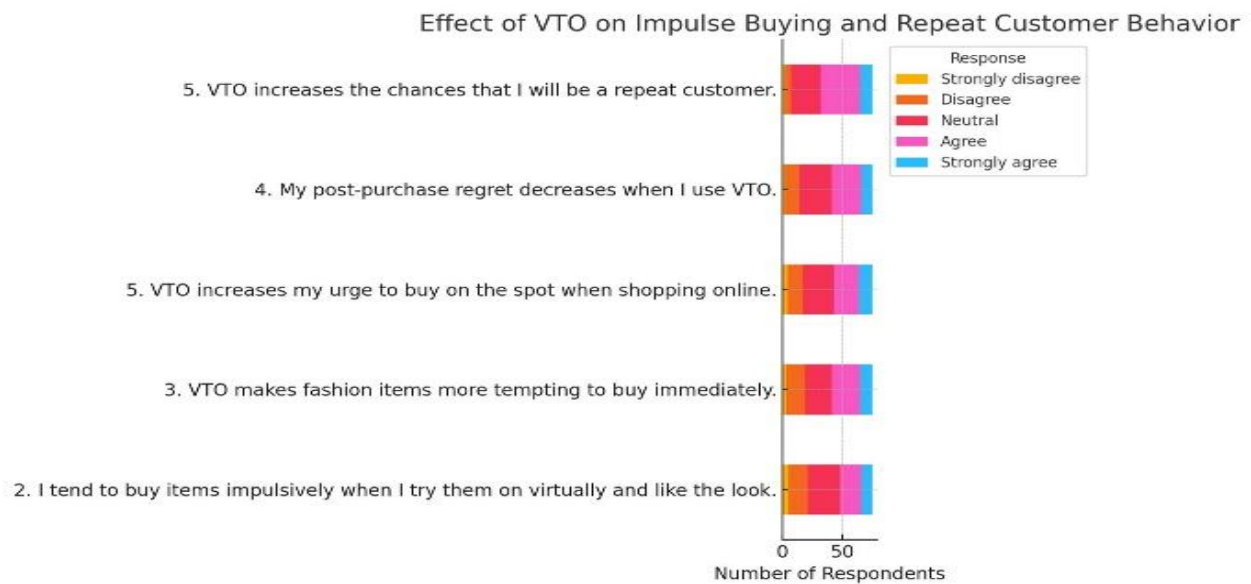


Figure 4: Effect of VTO on impulsive buying and repeat customer behaviour



Figure 5: Customer perception of VTO and online shopping experience

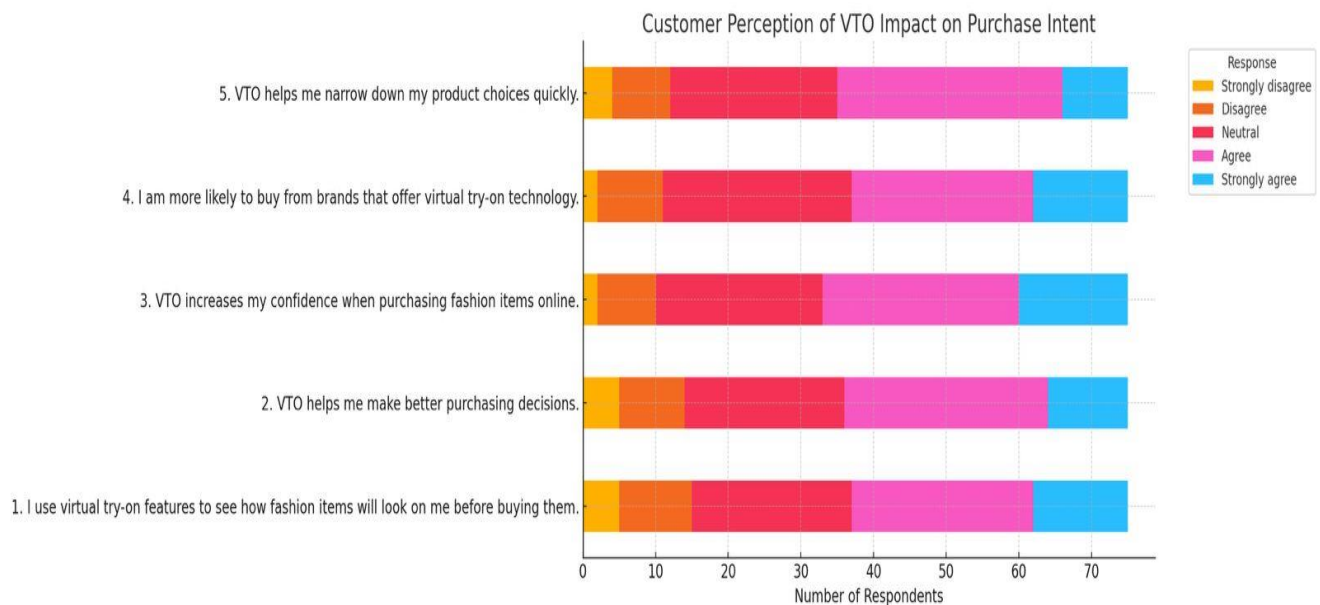


Figure 6: Customer perception of VTO impact on purchase intent

VI.CONCLUSION

Virtual Try-On (VTO) technology's effect on customer purchase intent together with buying experience and perceived ease of use and impulsive buying urge was studied. Research data through literature studies combined with a primary survey of 75 participants show VTO technology has positive effects on consumer confidence and satisfaction of purchases and brand preference.

VTO technology transforms online shopping by combining user-friendly access with interactive encounters thus becoming an effective tool for improving consumer behaviours and brand loyalty.

REFERENCES

1. Aisyah Mutia Dawis, R. A. (2024:). Implementation of Virtual Try-On Product to Enhance Customer Satisfaction. *Jurnal Teknologi Informasi dan Komunikasi*, 147-158.
2. Anna Watson, B. A. (2018). The impact of experiential augmented reality applications on fashion purchase intention. *International Journal of Retail & Distribution*.
3. Aurélie Merle, S. S.-O. (2012)). Whether and How Virtual Try-On Influences Consumer Responses to an Apparel Web Site. *International Journal of Electronic Commerce*, 41-64.
4. Caixia Chen 1, 2. ,. (2024,). Virtual Try-On Systems in Fashion Consumption A Systematic Review. *Appl. Sc*, 14, 11839.
5. Dang, T. (2019). The influence of Artificial Intelligence, Augmented. *UGC Journal No. 40942*.
6. Gubiniova, P. M. (2025). Exploring Gen Z's Adoption of Virtual Try-On Technology: The Moderating Role of Virtual Trial Experience in the Digital Fashion.
7. Hyunwoo Hwangbo, E. H.-H. (2018). Effects of 3D Virtual "Try-on" on Online Sales and Customers' Purchasing Experiences.
8. Jiyeon Kim, S. F. (n.d.). Adoption of sensory enabling technology for online apparel shopping. *European Journal of Marketing*, pp. 1101-1120.

9. Liang, Y. G. (2025,). The Impact of AI-Powered Try-On Technology on Online Consumers' Impulsive Buying Intention: The Moderating Role. . *Sustainability* , 17 2789.
10. Mensah, A. (2024). Impact of Virtual Fitting Technology on Online Apparel Sales in Ghana. *International Journal of Fashion and Design*, 15- 29.
11. Nada Sarkis, N. J. (2025). The impact of augmented reality within the fashion industry on purchase decisions, customer engagement, and brand loyalty. *International Journal of Fashion Design, Technology and Education*.
12. Ponto, H. J.-h. ((2020)). How 3D Virtual Reality Stores Can Shape Consumer Purchase Decisions: The Roles of Informativeness and Playfulness. *Journal of Interactive Marketing* , 70–85.
13. TASIN ISLAM, A. M. (2024). Deep Learning in Virtual Try-On A Comprehensive Survey.
14. Tingting Zhang, W. Y. (7 July 2019). The role of virtual try-on technology in online purchase decision from consumers' aspect. *Emerald Publishing Limited*.
15. Wahyono, Z. I. (May 2024,). THE EFFECT OF USING VIRTUAL TRY-ON ON PURCHASE INTENTION WITH ELECTRONIC WORD OF MOUTH AS A MEDIATION VARIABLE (CONSUMER PERSPECTIVE OF ECOMMERCE INDONESIA). *Journal of Sustainable Technology and Applied Science (JSTAS)*, pp. 6-17.
16. Xin Song 1, *. a. (2024,). AI-Driven Business Model: How AI-Powered Try-On Technology Is Refining the Luxury Shopping Experience and Customer Satisfaction. *J. Theor. Appl. Electron. Commer. Res.*, , 3067–3087.

