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AI-Powered Virtual Try-On and Purchase Confidence: Evidence from Indian Online Fashion Consumers

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Abstract : As AI is increasingly utilising in online fashion, Virtual Try-On (VTO) technology has emerged as a solution to enhance consumers' shopping experience by allowing them to see apparel virtually, even before they buy it. The study investigates how the use of AI-powered Virtual Try-On technology affects online fashion consumers' purchase confidence in India. In particular, it explores how perceived usefulness, perceived ease of use and perceived realism and accuracy relate to each other and affect consumers' confidence in product selection, apparel fit, and final purchase. The study has been designed on the basis of Technology Acceptance Model (TAM), with a quantitative approach and cross sectional research design, where 211 Indian online fashion consumers have been surveyed using a structured questionnaire. The collected data was analyzed using the Jamovi software, descriptive statistics, reliability assessment, and validity assessment, and multiple regression analysis.All three dimensions of the study show positive and statistically significant correlations with purchase confidence, which accounts for 47.3% of the total variance in purchase confidence. Perceived realism and accuracy was found to be the strongest predictor, followed by perceived usefulness and perceived ease of use. The research sheds light on the potential role of realistic and accurate, user-friendly AI-powered VTO applications in alleviating uncertainty and enhancing consumer trust in online fashion. The results of this study provide valuable insights for fashion retailers and eCommerce companies looking to enhance the digital shopping experience in India.

AI-Powered Virtual Try-On; Purchase Confidence; Online Fashion Retail; Perceived Usefulness; Perceived Ease of Use; Realism and Accuracy; Indian Consumers; Technology Acceptance Model (TAM).

I. INTRODUCTION

1.1 Background of the Study

Online fashion retailing has fundamentally changed consumer searching, assessment, and purchase behaviors due to convenience and the wide range of options available to the buyer. In comparison to in-store shopping, online shoppers are deprived of the sense of touch as they cannot try on clothes before buying. Similarly, the inability to see how the clothes look on their own body can lead to a sense of uncertainty about the purchase decision. Thus, the VTO technology has been introduced to allow the consumer to visualize themselves in the intended apparel before making the transaction (Kim & Forsythe, 2008; Merle et al., 2012).

Studies looking at the role of try-on and augmented reality in clothing stores have shown that being able to see products in a visual way can make online shopping better. It gives people information, lets them interact, keeps them interested and improves the whole experience (Pantano et al., 2017; Poushneh & Vasquez-Parraga 2017; McLean & Wilson 2019). The role of try-on, in terms of helping people look at products and decide to buy has been seen as a strong reason why people use virtual shopping (Beck & Crié 2018; Hwangbo et al., 2020). Especially when people feel confident that the clothes will fit them, they are more likely to make a purchase online (Merle et al., 2012; Nayak et al. 2022).

The coming of intelligence and 3D body mapping has made it possible to have more real and personal virtual try-on experiences and this lets people play with clothes in a way (Hashmi et al. 2020; Chennam Vijay et al. 2025). Therefore, there is a need to establish whether the use of AI-based VTO can enhance confidence in the fit of clothes which will impact the purchase decisions. This study focuses on examining AI-driven VTO and purchase confidence in the context of Indian online fashion shoppers.

1.2 AI-powered Virtual Try-On in Online Fashion Retail

A Virtual Try-On (VTO) is a technology that allows the consumer to digitally visualize how apparel or other fashion products can look on them within a virtual environment. Previous versions of this concept involved the use of virtual models, images, and 3D designs to enable the online shopper to see the intended apparel in a different perspective instead of on a traditional mannequin (Kim & Forsythe, 2008; Merle et al., 2012). Later, applications of AR in VTO allowed a more interactive and engaging experience with the ability to view the product with rich visualizations and increased interactivity between the shopper and the product (Pantano et al., 2017; Poushneh & Vasquez-Parraga, 2017).

The introduction of AI to VTO has enabled the inclusion of data about the body, including size and pose to make the virtual experience more realistic and individualized to the shopper (Hashmi et al. 2020). For instance, neural-body fitting and 3D pose mapping have been applied in clothes to virtual bodies during the VTO process to make it more realistic. Recently real-time AI and AR, with body scanning have been engaged to participate in interactive virtual dressing experience, where examples include dressing in real-time sarees for Indian fashion (Chennam Vijay et al. 2025).

1.3 Purchase confidence and consumer decision-making in fashion shopping

Purchase confidence refers to how sure consumers feel that the product they choose is the right one and that their decision is correct. In fashion shopping, purchasing confidence can be a big challenge. This is because customers cannot see, touch or try on clothes before buying. Because of this there is often uncertainty about the way how the clothes will look, feel or fit. These doubts can eventually make it harder to evaluate the product. They may lead to hesitation as well when making a decision (Kim & Forsythe 2008; Merle et al. 2012).

Virtual try-on or VTO essentially helps improve purchase confidence by giving consumers details than regular product images. Merle et al. (2012) show that confidence in how clothes fit is a major reaction to virtual try-on. This effect is stronger when consumers feel that the virtual image looks like them. Similarly, Nayak et al. (2022) find that confidence in fit is a factor that is essentially linked to the intention to buy in the Indian virtual fashion context.

Evidence from AR-based e-commerce shows that characteristics of technology such as product informativeness, interactivity, system quality, and reality congruence can influence cognitive consumer responses, including choice confidence (Kowalczuk et al., 2021). Therefore, looking at purchase confidence provides a useful perspective for understanding how AI-powered VTO may influence consumers' online fashion decisions beyond conventional measures such as technology adoption or purchase intention.

1.4 Indian Online Fashion Consumer Context

The Indian online fashion market is an important context in which to examine the role of AI-powered VTO because apparel purchases involve substantial uncertainty regarding fit, appearance, and product suitability. The rapid development of digital fashion retail has increased consumers' access to online apparel while the inability to physically try garments remains a fundamental limitation of the online shopping environment. VTO can solve this problem by letting consumers see how clothes look on a picture of themselves before they buy (Nayak et al. 2022).

Indian evidence shows that scholars are increasingly interested in VTO-enabled fashion buying. Nayak et al. A (2022) study actually found that confidence in how apparel fits, along with hedonic value helps people decide to buy in the virtual fashion world. Chidambaram et al. (2024) further noted that perceived usefulness, perceived risk and perceived enjoyment are some of the significant variables that influence consumers' general responses to VTO while shopping for clothes online. Recent empirical studies conducted in India have examined VTO experiences as well as their actual associations with purchase intention (Baber et al. 2026). Also powered virtual dressing systems made for fashion essentially show that real-time body measurement, AR and AI can cut uncertainty and boost confidence in picking products (Chennam Vijay et al., 2025).

1.5 Research Gap

Even though many studies show that VTO and AR can improve shopping, help people judge products, keep them engaged and boost purchase intention the literature still has big holes. Earlier work usually looks at VTO adoption, perceived usefulness, perceived ease of use, enjoyment, engagement or purchase intention. It rarely treats purchase confidence as a separate outcome (Kim & Forsythe 2008; Beck & Crié 2018; Watson et al. 2018). Merle et al. (2012) and Nayak et al. (2022) give us some evidence about confidence in apparel fit as well. They focus on a narrow part of what purchase confidence exactly means in this study.

The second gap concerns technology. Many basic studies examine VTO, 3D fitting or AR apps, not the newer AI-powered systems that can map bodies, personalize looks and show garments realistically (Pantano et al., 2017; Hwangbo et al., 2020; Hashmi et al. 2020). Recent work shows AI-enabled virtual dressing might cut uncertainty and help people choose but we still lack solid evidence at the consumer level (Chennam Vijay et al. 2025).

We can thus say that the evidence from India is thin. It mainly looks at purchase intention or technology acceptance (Chidambaram et al. 2024; Baber et al., 2026). Thus, the direct link between AI-powered VTO features— usefulness, ease of use and realism/accuracy and purchase confidence among Indian online fashion consumers is not clear.

1.6 Research Question and Research Objectives

The gap above leads to this research question:

Research Question:

To what extent does AI-powered virtual try-on technology influence purchase confidence among online fashion consumers?

The study therefore sets these objectives:

Research Objective 1: Examine how perceived usefulness of AI-powered VTO relates to purchase confidence among online fashion consumers.

Research Objective 2: Assess how perceived ease of use of AI-powered VTO relates to purchase confidence.

Research Objective 3: Determine how perceived realism and accuracy of AI-powered VTO relate to purchase confidence.

Together these objectives aim to clarify whether parts of AI-powered VTO technology help consumers feel confident about product selection, apparel fit and their purchase decisions.

1.7. Scope of the Study

This study matters because it shifts focus from technology adoption and purchase intention to the more personal feeling of purchase confidence. By looking at perceived usefulness, perceived ease of use and realism/accuracy the study offers a consumer-centered view of how AI-powered VTO can aid product evaluation and buying choices. The study is limited to online fashion consumers and only includes apparel shopping that uses AI-powered virtual try-on experiences. It measures purchase confidence by asking about confidence in product selection, apparel fit and the overall purchase decision. The study does not test algorithms or real sales numbers.

1.8 Organization of the Paper

This paper is divided into five parts. After the introduction the literature review discusses existing research on VTO, consumer behaviour and purchase outcomes. The theoretical framework explains how the Technology Acceptance Model is applied. The conceptual framework shows the study variables and proposed links. Finally, hypothesis development sets out the expected relationships between VTO dimensions and purchase confidence, among online fashion consumers.

II. Literature Review

2.1 Evolution of Virtual Try-On Technology

Virtual Try-On has evolved from showing digital pictures of clothing to a complex system that uses artificial intelligence, computer vision, 3D modeling and augmented reality. Early literature established the potential of Try-On in addressing the challenges of online clothing shopping by providing a visual representation of an item of clothing rather than a generic image of the product (Kim & Forsythe 2008). Later works demonstrated the ability of Try-On to influence the responses of consumers by providing an individualized view of the product and aiding them in evaluating fit, appearance and fashionability of garments (Merle et al., 2012).

Virtual Try-On has integrated augmented reality to offer an engaging experience allowing consumers to interact with products. Researchers have shown that augmented reality can provide high information quality, interactivity, enjoyment and an enhanced online consumer experience, which influences the decision-making capacity of individuals in online settings (Pantano et al. 2017; Poushneh & Vasquez-Parraga 2017). Later literature expanded on the role of augmented reality in fitting by establishing its role in product exploration, customer engagement and purchase intention (Beck & Crié 2018; McLean & Wilson 2019; Watson et al. 2018). More recent works have shown the shift of Virtual Try-On toward personalization and photorealistic rendering to achieve dynamic virtual fitting (Hashmi et al., 2020; Chennam Vijay et al. 2025).

2.2 VTO and Online Fashion Consumer Behaviour

The role of Virtual Try-On in influencing online fashion consumer behaviour can be seen through its ability to change the evaluation of products, the level of interaction with the shopping environment and the purchase decisions of individuals. Traditional online clothing shopping rarely offers consumers the opportunity to see how a product would look leaving fitting, appearance and other attributes as uncertainties in the decision-making process. Virtual Try-On removes these uncertainties by providing a view of the product enhancing information richness and potentially influencing the overall consumer response (Kim & Forsythe 2008; Merle et al., 2012).

Literature has shown the impact of Virtual Try-On on consumer responses both in cognitive and affective terms. Merle et al. (2012) demonstrates the ability of Virtual Try-On to enhance value by boosting fit confidence among consumers while individualization and self-congruity predicted the overall response to Virtual Try-On. Similarly augmented reality applications have been linked to levels of interactivity, information quality, personalization and immersion that go beyond the mere informational utility of the technology affecting consumer cognition and engagement (Pantano et al., 2017; McLean & Wilson 2019). Further researchers have shown the ability of Virtual Try-On that impacts the responses of consumers, including patronage, exploratory behaviours and purchase intention. Beck & Crié (2018) demonstrates that virtual fitting can boost curiosity, exploratory behaviours, patronage and purchase intention of consumers while Watson et al. (2018) identifies effects of experiential augmented reality applications on fashion purchase intention. Poushneh & Vasquez-Parraga (2017) highlight the impact of augmented reality on customer experience, satisfaction, perceived product quality and purchase intention. Finally a recent study has shown the relationships between immersion, engagement and purchase intention among Indian consumers in the context of Virtual Try-On (Baber et al., 2026).

It is noteworthy that most of the literature examined the role of Virtual Try-On in purchase intention, engagement, satisfaction or technology acceptance rather than confidence in the purchase decision directly. Thus, while the body of work has shown the impact of Virtual Try-On on the behaviour of clothing shoppers, more research is needed to establish the effect of AI-driven Virtual Try-On on the confidence of individuals in their purchase choices.

2.3 Perceived Usefulness and Perceived Ease of Use

Perceived usefulness and perceived ease of use are determinants of the acceptance and evaluation of technology by consumers. In general, perceived usefulness refers to the degree to which an individual believes that a particular technology can provide advantageous outcomes. Perceived ease of use denotes the level of simplicity with which a consumer can use a technological innovation. In the context of Virtual Try-On, both perceived usefulness and perceived ease of use are critical in shaping the response of the consumer to online clothing shopping that involves Virtual Try-On.

Early literature provides evidence on the role of Virtual Try-On in clothing shopping, highlighting the value of Virtual Try-On in providing an informative view of garment attributes and assisting the consumer in completing the purchase decision (Kim & Forsythe 2008). Merle et al. (2012) demonstrates the ability of Virtual Try-On to provide value to the consumer by affecting the evaluation of garment fit, which is enhanced when the consumer views their own image in the virtual fitting environment. Thus, multiple pieces of literature emphasize the importance of usefulness as a determinant of the response to Virtual Try-On both in terms of information provision and personalization. Pantano et al. (2017) notes the ability of augmented reality applications to influence consumer responses through factors such as perceived usefulness, perceived ease of use, information quality, interactivity, aesthetics and overall enjoyment. Likewise, Yang & Kim (2024) in their work on the adoption of 3D fitting technology among online consumers has pointed out how the above variables actually affect the adoption of this technology. Nayak et al. (2022) in their study on consumers basically stresses upon the role of technology acceptance variables while at the same time evaluating virtual products as in how useful the technology is actually in the context of virtual online fitting (Chidambaram et al. 2024). Thus, the body of research ultimately shows that perceived ease of use and perceived usefulness play a role in shaping how people respond to Virtual Try-On.

These factors influence how people see the value of Virtual Try-On making them important, in determining whether consumers will adopt the technology. While these factors are critical, their impact on the consumer depends on how they're integrated into the framework of Virtual Try-On. Virtual Try-On may be easy to use but provide incorrect information ultimately affecting the consumer's response negatively. Thus, both usefulness and ease of use are essential in the context of AI-powered Virtual Try-On as they determine the ability of Virtual Try-On to provide information and convenience to the consumer. The impact of these factors on purchase confidence is based on the fact that they affect the likelihood of obtaining the information about the product conveniently which ultimately enhances the certainty of the consumer in the correctness of their decision.

2.4 Realism and Accuracy in AI-Powered VTO

The elements of realism and accuracy have become more prominent in the discussion of VTO due to their potential to influence the perceptions of online shoppers. Literature has demonstrated the importance of the similarity of the visual representation to the consumer's own appearance in the evaluation of product attributes and response to VTO applications (Merle et al., 2012; Plotkina & Saurel, 2019). Similarly, researchers have shown that accuracy in how a product is presented can influence how a consumer responds to the technology (Pantano et al., 2017; Kowalczuk et al., 2021).

Advancements in intelligence have made it possible to develop more realistic virtual try-on procedures. These use computer vision; 3D poses estimation and neural body fitting to capture body features and show them in a way (Hashmi et al. 2020). In this way, augmented reality can scan a consumer's body and present it accurately, helping garments appear more realistic (Chennam Vijay et al. 2025). Also, researchers stress that realism is very important, in the context of augmented reality shopping applications (Kowalczuk et al. 2021).

2.5 VTO, Uncertainty and Perceived Risk

The presence of uncertainties in the online clothing shopping process is one of the key concerns of consumers, as fitting, appearance, and other attributes of garments are difficult to assess prior to trying on the items. Literature has demonstrated the capacity of VTO to reduce the levels of these uncertainties by providing a more informative view of the product than traditional online shopping methods allow (Kim & Forsythe, 2008; Merle et al., 2012). As a result, VTO can decrease the overall perceived risk associated with the purchase decision while enhancing the confidence of the consumer in their choice.

Researchers have shown that VTO can help reduce the uncertainty that comes with buying something by offering a helpful experience. This in turn changes how a person feels about the way they shop and the actual act of buying. For example, Merle and others in 2012 say that feeling confident about how a piece of clothing fits is a key factor in how useful people find VTO. Plotkina and Saurel in 2019 found that when the way a clothing item looks online is similar to how it looks people feel more confident about the fit.

Because of this, feeling confident about how a garment fits and seeing how similar the online picture is to the things are very important in helping customers feel less unsure about how the clothing will look and fit. Another important factor is the perceived risk. This is again something that affects how people basically behave when they shop for clothes online. Studies have also shown that this risk plays a very important role in terms of deciding whether to make a purchase or not. Chidambaram and others in 2024 find perceived risk is a part of how people actually get to decide to buy online. Akter and others in 2025 say that perceived risk affects how VTO influences clothing shopping. They also show that this factor can control or manage the relationship between VTO and online shopping. In other words, the perceived usefulness and validity of information offered by VTO dictate the extent to which the utilization of the technology reduces the levels of uncertainty associated with the purchase decision. Combined together, the reduction of perceived risk and uncertainty in the purchase decision process can impact the confidence of the consumer in their decision.

2.6 VTO, Purchase Confidence and Purchase Intention

VTO technology has the capacity to influence the responses of consumers to information provided about the product, enabling them to obtain richer representations than traditional online shopping allows. In this regard, most researchers have focused on the role of VTO in purchase intention, willingness to buy, and general technology acceptance, neglecting the importance of purchase confidence as a vital aspect of the consumer response process and its role in determining buying behaviors.

Early literature has demonstrated the ability of VTO to influence the attitude of the consumer toward the garment and the overall purchase. Merle et al. (2012) highlights the importance of confidence in fit as a predictor of utilitarian value associated with the purchase, which in turn, influences the intention of the consumer to buy. Thus, the role of the purchase confidence is pivotal in the context of VTO, as it determines the likelihood of the consumer to make the purchase. The same literature has demonstrated the role of self-congruity in the determination of the overall response to the virtual fitting technology, indicating the significance of the evaluation of fit in terms of personal characteristics of the consumer. Similarly, Nayak et al. (2022) have studied how VTO essentially works in the decision-making process of Internet users. They found that confidence in how clothing fits is a factor that shapes purchase intention in a virtual marketplace. VTO also brings hedonic value to the virtual fitting experience.

Researchers have shown that VTO influences purchase intention, across different consumer groups and technology settings. In particular, Beck & Crié (2018) highlights the role of virtual fitting rooms in boosting the level of exploratory behavior, shopping patronage, and purchase intention of the consumer, while Watson et al. (2018) notes the effect of experiential AR on fashion consumers' purchasing behaviors. Poushneh & Vasquez-Parraga (2017) identifies the impact of AR-based shopping experiences on customer experience, satisfaction, perceived quality, and purchase intention. Similarly, the recent body of work has elaborated on the mechanisms of the impact of VTO on purchase intention, basically, the role of immersive experiences. Baber et al. (2026) comes up with a point that when Indian consumers use AR, it can moderately forecast their purchase intentions. Chidambaram et al. (2024) says that perceived usefulness, perceived risk and perceived enjoyment are indeed the significant drivers of how people actually feel about VTO and how these feelings change purchase intention.

This stream of literature provides substantial evidence on the role of VTO in the enhancement of purchase intention, utilization of immersive experiences, and overall impact on the behavioral response of the consumer to the virtual fitting technology. Still, the studies tend to focus on the examination of purchase intention rather than purchase confidence as a determinant of buying behaviors.

2.7 Evidence from Emerging-Market Consumers

Research conducted among Indian and other emerging-market consumers gives solid evidence about how VTO works in online clothing shopping. Nayak and colleagues (2022) studied 410 Indian Internet users to see how online virtual fitting works in fashion retail. They found that consumer confidence in how clothes fit, along with enjoyable aspects of the virtual fitting experience helps predict purchase intention in an online setting. Similar evidence comes from studies on online shoppers. Akter and colleagues (2025) on the other side identify that perceived usefulness, perceived risk and perceived enjoyment are indeed the predictors of attitudes towards VTO which eventually influence VTO purchase intention for Bangladeshi consumers. An additional study clearly examining the consumer also strongly determines that perceived usefulness, perceived risk and perceived enjoyment predict attitudes towards VTO (Chidambaram et al. 2024). Baber and colleagues (2026) also identified that immersion, perceived innovativeness and engagement can be useful predictors of purchase intention when using virtual fitting. Studies examining the reaction of emerging Asian consumers to fitting provide critical evidence for virtual trying out practices in online clothing shopping.

Yang and Kim (2024) examined 3D virtual fitting technology with Southeast Asian users spotting factors that affect their acceptance. They found that usefulness and ease of use strongly shape attitudes toward 3D virtual fitting, which then drives users' intention to use the technology. Similarly, Akter and colleagues (2025) analyzed how intended use of VTO relates to purchase decisions among Bangladeshi consumers showing the predictive power of VTO. Thus, the body of work offers evidence that VTO links to purchase intention for emerging-market online shoppers. However studies on consumers are still limited especially when it comes to examining purchase confidence.

2.8 Critical Synthesis and Research Gap

The literature reviewed shows how VTO has evolved from a visualization tool into a lively, engaging and informative way to shop for clothes online helping personalize and improve visual fitting of garments. The body of work gives evidence about how VTO and AR affect consumers, including their experience, engagement, product perception, attitude toward online shopping and technology and purchase behavior (Beck & Crié 2018; McLean & Wilson 2019; Pantano et al. 2017; Poushneh & Vasquez-Parraga 2017). In particular, many studies stress how perceived ease of use and perceived usefulness shape attitude toward VTO and purchase intention and how personalization and similarity matter for response when it comes to fitting technology (Pantano et al., 2017; Yang & Kim 2024; Kowalczuk et al. 2021). However, a big gap in research stops us from fully understanding VTO's role in online clothing shopping.

Firstly, most literature looks at VTO or uses AR just as a visual aid without much detail on how technology is adopted on purchase behavior (Merle et al., 2012; Plotkina & Saurel 2019). In contrast, new VTO developments use intelligence to increase individualization, including body scanning and neural fitting (Hashmi et al., 2020; Chennam Vijay et al. 2025). Secondly, researchers have only spent time studying how VR affects purchase confidence mostly focusing on purchase intention or willingness to buy, adopt and engage with VTO (Merle et al. 2012; Beck & Crié 2018; Nayak et al. 2022; Watson et al., 2018). Purchase confidence is a factor in buying with VTO yet it usually shows up only as a mediator in the studies on virtual fitting. Thirdly, while the work has noted VTO's part in consumer response and the importance of perceived usefulness and ease of use, it has given only little attention to how these factors affect purchase confidence. This gap is even larger for shoppers in India, who have studied a lot but we still need more insights into their confidence in purchase decisions.

III. THEORETICAL FRAMEWORK

3.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is one of the most popular theoretical models that explain individuals' acceptance and use of information technologies (Davis, 1989). According to the model, users' behavioural intentions and usage of a technology are primarily influenced by perceived usefulness and perceived ease of use. Perceived usefulness reflects to what extent an individual believes that using a certain technology would result in task performance improvement, whereas perceived ease of use reflects their belief that using the technology will not require much effort (Davis, 1989).

The two beliefs are thought to influence an individual's attitude towards using a technology and subsequently behavioural intention and usage. Perceived usefulness is a significant predictor of acceptance because users are more likely to accept a technology when they believe that it provides valuable functional benefits. Perceived ease of use can also influence acceptance directly and indirectly because technologies that are easier to understand and operate would require less mental effort from users. In addition, ease of use can lead to increased perceived usefulness when a technology can be accessed and operated without substantial difficulty (Davis, 1989).

TAM has subsequently been used in various digital and consumer technology contexts because it explains technology-related perceptions and behavioural responses. Furthermore, in the context of augmented reality and virtual shopping, studies have indeed picturized the role of perceived usefulness and perceived ease of use in mediating consumer responses to technological innovation and adoptions (Pantano et al., 2017; Yang and Kim, 2024). Research on the use of VTO in consumer decision-making also reveals one valid point that customers are more concerned with the ability of these technologies to actually provide useful product information and allow them to assess products conveniently at ease (Kim and Forsythe, 2008; Chidambaram et al., 2024).

For the present study, TAM provides the theoretical basis for examining AI-powered VTO. Perceived usefulness and perceived ease of use are treated as the core technology-related dimensions through which consumers evaluate the value and usability of VTO, providing a theoretical foundation for examining their relationships with purchase confidence.

3.2 Application of TAM to VTO and Augmented Reality

TAM provides a relevant theoretical basis for understanding consumer responses to Virtual Try-On (VTO) and augmented reality (AR) because these technologies require consumers to evaluate their functional value and usability. In the context of online clothing shopping, perceived usefulness can be related to the degree to which VTO helps customers obtain information about the desired apparel, visualize it, evaluate its suitability, and make an informed choice. On the other hand, perceived ease of use refers to the convenience of using VTO systems to shop for clothing.

Moreover, research findings support the applicability of TAM to the context of virtual shopping. In particular, Pantano et al. (2017) integrated perceived usefulness and ease of use into their model of augmented reality-based decision-making and demonstrated these variables' significance, alongside information quality, interactivity, aesthetics, and enjoyment. Yang and Kim (2024) showed that usefulness and ease of use predicted consumer acceptance of 3D virtual fitting technology. Earlier VTO research also showed that consumers could perceive virtual try-on as a source of useful product information and decision support (Kim & Forsythe, 2008).

The relevance of applying TAM becomes stronger as VTO becomes more sophisticated AI-powered technology. Consumers not only have to evaluate whether the technology is useful but also whether its interface and functions can be used conveniently. Therefore, perceived usefulness and perceived ease of use provide an appropriate theoretical basis for explaining consumers' initial evaluations of AI-powered VTO and their subsequent responses to the technology. In addition, these perceptions can help explain why consumers may perceive the technologically advanced VTO as valuable for reducing the difficulties associated with online apparel evaluation and product comparison during shopping.

3.3 Extending TAM to Purchase Confidence

Although TAM primarily explains technology acceptance and behavioural intention, its constructs can provide a foundation for examining consumer outcomes beyond technology adoption. In the present study, TAM is extended to examine purchase confidence, defined as consumers' assurance regarding product selection, apparel fit, and the overall purchase decision. This extension is appropriate because technology acceptance may generate value not only from continued use but also from improved decision quality and reduced uncertainty.

VTO provides consumers with additional information that can support product evaluation.
Perceived usefulness may therefore increase purchase confidence when consumers believe that the technology helps them assess apparel more effectively. Studies that has been done previously on VTO emphasizes the role of perceived usefulness in triggering consumer confidence through measurement accuracy and fit (Merle et al., 2012; Nayak et al., 2022), whereas research on AR systems generally showcases product informativeness and system characteristics as factors that influence consumers' selection confidence (Kowalczuk et al., 2021). Therefore, ease of use may also be related to the ability to acquire information about the product conveniently. When VTO is simple to operate, consumers may be able to focus more effectively on evaluating the product rather than operating the technology. Therefore, TAM can be extended towards purchase confidence to capture a consumer-level outcome that is relevant to online fashion shopping.

This theoretical extension does not replace TAM's original focus on acceptance. Instead, it broadens its application by examining whether positive technology perceptions can contribute to greater certainty in purchase-related judgments. The proposed framework therefore positions perceived usefulness and perceived ease of use as antecedents of purchase confidence.

3.4 Theoretical Rationale for Purchase Confidence

Purchase confidence is positioned as the dependent variable because online fashion purchasing involves uncertainty regarding product selection, appearance, fit, and overall suitability. From a theoretical perspective, AI-powered Virtual Try-On (VTO) can provide consumers with additional information that supports the evaluation of these attributes. If the technology allows for obtaining product information and visualizing it realistically and accurately, the consumer will be confident in their choice and the fit of the selected apparel.

This is of course evident from the study conducted by Merle et al. (2012), which highlighted the importance of confidence in fit in the context of VTO. Additionally, Nayak et al. (2022) essentially revealed the influence of fit confidence on Indian consumers' likelihood to purchase apparel using VTO, whereas Kowalczuk et al. (2021) showcased how various product-and system-related factors can affect consumer decisions in the case of AR. The study revealed the effect of characteristics of AR systems on consumer choice confidence, illustrating the importance of confidence in technology-mediated shopping contexts. Accordingly, purchase confidence provides a theoretically meaningful extension of TAM because it captures the outcome of consumers' evaluations rather than focusing exclusively on technology acceptance or behavioural intention. The present framework proposes

that perceived usefulness, perceived ease of use, and realism/accuracy can contribute to purchase confidence by improving the information, accessibility, and credibility of virtual product evaluation. This provides the theoretical basis for examining whether AI-powered VTO can make Indian online fashion consumers more assured in their purchase decisions.

IV. Conceptual Framework

4.1 Variables of the Study

The present study examines the relationship between AI-powered Virtual Try-On (VTO) technology and purchase confidence among Indian online fashion consumers. Based on the Technology Acceptance Model and the reviewed literature, three dimensions of AI-powered VTO are identified as independent variables: perceived usefulness, perceived ease of use, and realism/accuracy. These dimensions represent consumers' perceptions of the functional value, usability, and quality of virtual product representation (Davis, 1989; Pantano et al., 2017; Hashmi et al., 2020).

Purchase confidence constitutes the dependent variable. The conceptual framework should relate to the extent to which customers feel assured about the product selection, apparel fit, and purchase decision. Research that has been undertaken prior to this established the role of fit confidence and choice confidence in a technology-mediated shopping context (Merle et al., 2012; Kowalczuk et al., 2021; Nayak et al., 2022).

Therefore, the proposed conceptual model suggests that perceived usefulness, perceived ease of use, and realism/accuracy factors will impact purchase confidence in Indian fashion consumers shopping online.

4.2 Independent Variables: Perceived Usefulness, Perceived Ease of Use and Realism/Accuracy

The conceptual framework highlights perceived usefulness, perceived ease of use, and realism/accuracy as the three independent variables that influence the confidence in purchase. The first two factors derive from the Technology Acceptance Model, whereas realism/accuracy is added to reflect the unique technological features of modern AI-powered Virtual Try-On (VTO).

Perceived usefulness denotes the extent to which consumers perceive that VTO will facilitate their online apparel shopping experience and help them evaluate products. In an online context, usefulness may result from the possibility to visualize the items, obtain additional information about them and assess the appropriateness before purchase. Earlier studies have shown that perceived usefulness plays an important role in shaping consumers' acceptance of VTO and AR technologies, as well as their decision-making (Kim & Forsythe, 2008; Pantano et al., 2017; Yang & Kim, 2024). Adding to this, Chidambaram et al. (2024) similarly identified perceived usefulness as an important antecedent once again within the VTO purchase-intention process.

Perceived ease of use on the other hand indicates how easy it is for consumers to access and operate VTO. An easy-to-access and operate VTO may eliminate technological barriers and enable consumers to focus on the evaluation of the apparel. Its importance has been shown in AR and 3D virtual fitting research, where the ease of use contributes to technology acceptance (Pantano et al., 2017; Yang & Kim, 2024).

Realism/accuracy reflects the perceived quality of the virtual representation. The term denotes the extent to which the visualization would represent the consumer's body and the desired appearance and fit of the garment. The use of AI-based body mapping, pose estimation and fitting by neural networks has enhanced the possibility of individualized and realistic representation (Hashmi et al., 2020).

Contemporary AI-AR systems further demonstrate the potential of real-time body measurement and garment simulation to improve virtual dressing experiences (Chennam Vijay et al., 2025). Therefore, realism/accuracy is expected to influence the credibility of VTO information and consumers' confidence in evaluating apparel.

4.3 Dependent Variable: Purchase Confidence

Purchase confidence is the dependent variable in the present conceptual framework and represents the degree to which consumers feel assured about the suitability and appropriateness of their intended online fashion purchase. It is conceptualized through three related dimensions: confidence in product selection, confidence in apparel fit, and confidence in the overall purchase decision. This broader conceptualization distinguishes purchase confidence from purchase intention, which primarily reflects the consumer's willingness or likelihood to purchase.

The importance of confidence during the virtual apparel shopping process emerges through the evidence provided by past research. The study conducted by Merle et al. (2012) proved that the sense of confidence in a person's ability to choose the correct apparel size is an essential element of their reaction to a clothing virtual try-on (VTO). The research conducted by Nayak et al. (2022) proved that the sense of confidence in a buyer's ability to select the correct apparel size is one of the key predictors of purchase intention among Indian consumers. Similarly, Kowalczuk et al. (2021) included the element of choice confidence while analyzing the impact of augmented reality (AR)-based e-commerce on the purchase intention of the buyers.

Within the present framework, purchase confidence represents the psychological outcome of consumers' evaluation of AI-powered VTO. When consumers perceive virtual visualization as useful, easy to use, and realistic or accurate, they may feel better informed about product suitability. From this, it could be inferred that higher confidence levels would reflect a buyer's assurance in an apparel choice, fit, and ultimately, purchase.

4.4 Proposed Relationships Among Variables

The conceptual framework postulates that perceived usefulness, perceived ease of use, and realism/accuracy of AI-powered Virtual Try-On (VTO) have positive relationships with purchase confidence. These relationships were developed based on the Technology Acceptance Model and previous research on virtual shopping and the use of augmented reality by consumers.

The influence of perceived usefulness on shopping confidence is positive because a person's confidence in making a purchase grows when they believe that the VTO provides valuable information about the product and allows them to properly assess the choice. This assumption is supported by research on consumers' attitudes towards VTO and virtual fitting technology, which highlights the criticality of usefulness in this context (Kim & Forsythe, 2008; Pantano et al., 2017; Chidambaram et al., 2024).

Similarly the impact of perceived ease of use is positive because it lowers the difficulty of interacting with VTO technology. This makes it easier for the consumer to find information about the product. As a result the consumer feels more confident when making a purchase.
Ease of use has also been shown to be a factor in the acceptance of VTO and AR technology. (Pantano et al., 2017; Yang & Kim 2024).

Finally the influence of realism and accuracy is also positive. Realistic images help the consumer get a sense of how the product will look. This accurate visual information is very important for their evaluation and decision-making process. The accuracy of product representation in VTO and AR has been found to be a predictor, in multiple studies. (Plotkina & Saurel 2019; Kowalczuk et al., 2021; Hashmi et al. 2020).Thus, all three independent variables have a positive effect on consumer confidence while making a purchase.

4.5 Conceptual Framework Model

The conceptual framework presents AI-powered Virtual Try-On (VTO) technology through three independent variables: perceived usefulness, perceived ease of use, and realism/accuracy. These variables are suggested to affect the variable purchase confidence. The framework is based on the Technology Acceptance Model, which points out that perceived usefulness and perceived ease of use are factors in accepting new technology (Davis, 1989). Realism or accuracy is included to capture the practical features of current virtual try-on tools, particularly their ability to show how clothing may look and fit on an individual's body in a given setting (Hashmi et al., 2020; Chennam Vijay et al., 2025). The proposed relationships provide the basis for subsequent hypothesis development.

4.6 Explanation of the Conceptual Framework

The conceptual framework proposes that consumers' perceptions of AI-powered VTO influence their confidence when making online fashion purchases. Perceived usefulness is the extent to which a consumer feels that VTO is of use to him/her (e.g., facilitates product assessment or provides supplementary information), whereas perceived ease of use reflects the convenience associated with using the technology (Davis, 1989; Pantano et al., 2017). Realism and accuracy refer to how true and believable virtual representations appear. This includes showing the consumer's body and clothing features in a way that feels correct and reliable (Hashmi et al., 2020; Chennam Vijay et al. 2025). The model suggests that when people view these three aspects positively they feel more confident about making a purchase. I see this idea as matching research that found try-on tools make people more confident about how clothes fit and that augmented reality makes people feel more certain about their shopping choices (Merle et al. 2012; Kowalczuk et al., 2021; Nayak et al. 2022). Because of this the model provides a base for studying whether these views, on technology influence how confident Indian online fashion shoppers feel when making purchases.

V. HYPOTHESIS DEVELOPMENT

5.1 Perceived Usefulness and Purchase Confidence

The concept of perceived usefulness suggests that consumers believe the use of AI-powered VTO improves their ability to evaluate the product and make appropriate purchasing decisions. Within TAM, perceived usefulness is recognized as a key determinant of technology acceptance because of the tendency for positive response when the technology provides meaningful functional benefits (Davis, 1989). VTO can provide additional information about the appearance, suitability, and fit of the apparel.

Earlier studies show that usefulness matters a lot when people shop online. Kim and Forsythe (2008) discovered that virtual try-on (VTO) gives shoppers information about clothing. Pantano and colleagues (2017) and Yang and Kim (2024) have also shown that usefulness is important for AR and 3-D virtual fitting tools. Chidambaram et al., (2024) pointed out that people in India see usefulness as a factor in VTO. In addition, (Merle et al., 2012; Nayaket al., 2022) have highlighted that confidence in how a fit looks is also crucial. Therefore, increased perceived usefulness is expected to enhance the consumer's confidence in product selection, fit, and purchase decisions.

H1: Perceived usefulness of AI-powered VTO has a significant positive effect on purchase confidence among Indian online fashion consumers.

5.2 Perceived Ease of Use and Purchase Confidence

The concept of perceived ease of use suggests that the consumer believes that the use of AI-powered VTO can be operated with a minimal amount of effort. According to TAM, users are expected to respond positively to technologies that are understandable, convenient, and relatively free from complexity (Davis, 1989). Ease of use would allow the consumer to interact with VTO while effectively evaluating the apparel.

I read that Pantano and colleagues (2017) said that ease of use is a factor for AR-based applications. I also saw Yang and Kim (2024) say that ease of use helps people accept 3D fitting technologies. Kim and Forsythe (2008) and Chidambaram et al., (2024) also looked into this and emphasized the importance of technology-related perceptions in the context of VTO. Once AI-powered VTOs are easy to operate, the consumer is able to gain and process the product information with minimal effort, which facilitates the evaluation and purchase decision-making with increased confidence. Therefore, perceived ease of use is expected to positively affect the consumer's purchase confidence.

H2: Perceived ease of use of AI-powered VTO has a significant positive effect on purchase confidence among Indian online fashion consumers.

5.3 Realism/Accuracy and Purchase Confidence

The concepts of realism/accuracy suggest that the use of AI-powered VTO provides a realistic and accurate visual representation of the consumer and apparel. Since virtual shopping does not involve physical try-on, realism may provide credible product information on appearance and fit. Kowalczuk et al. (2021) further identified reality congruence and product informativeness as important factors for the consumer's choice of confidence.

AI developments, such as 3D pose mapping and neural body can improve the individual virtual representation (Hashmi et al. 2020). Recent AI-AR applications now include real-time body measurement, like the virtual saree dressing (Chennam Vijay et al. 2025). When the consumer perceives the virtual representation as realistic and accurate, she/he is more likely to consider the information as credible and relevant to the evaluation of product suitability and fit. Thus, the concepts of realism/accuracy are expected to positively influence the purchase confidence.

H3: Perceived realism and accuracy of AI-powered VTO has a significant positive effect on purchase confidence among Indian online fashion consumers.

5.4 AI-Powered VTO Dimensions and Overall Purchase Confidence

Perceived usefulness, perceived ease of use, and realism/accuracy are distinct but complementary characteristics of AI-powered VTO. Usefulness provides the functional value of the technology, which supports the evaluation of product (Kim & Forsythe, 2008; Merle et al., 2012), while ease of use decreases the effort required to gain and process the information (Pantano et al., 2017; Yang & Kim, 2024). Realism and accuracy facilitate the relevance and credibility of virtual representation (Plotkina & Saurel, 2019; Kowalczuk et al., 2021).

The examination of these dimensions collectively would allow for a more comprehensive understanding of the purchase confidence because such factors as functional value, ease of use, and representational quality may equally contribute to the

consumer's evaluation of AI-powered VTO. Previous literature has explored multiple characteristics of VTO, as well as multiple purchase-related behavioral outcomes, particularly in terms of acceptance and purchase intention, but the attention to the role of purchase confidence is limited
(Chidambaram et al., 2024; Baber et al., 2026). Therefore, the mentioned three dimensions are expected to contribute equally to the purchase confidence.

H4: Perceived usefulness, perceived ease of use, and perceived realism/accuracy of AI-powered VTO collectively have a significant positive effect on purchase confidence among Indian online fashion consumers.

VI. METHODOLOGY

6.1 Research Design

The study uses a cross-sectional research design. This design helps to look at the connection between how consumers see AI-powered Virtual Try-On technology and their confidence when buying fashion items online. Data is collected at one point in time using an online questionnaire. The quantitative method allows responses to be measured with numbers. These numbers are then analysed using techniques that fit the data.

6.2 Data Collection & Target Population

The study uses data. This data is gathered through a questionnaire made with Google Forms. The questionnaire is shared online through digital platforms to reach people who shop for fashion products on the internet. Before answering the questions respondents are given an explanation of what AI-powered Virtual Try-On technology is. This makes sure that all participants understand the topic being studied. Respondents are told that their answers will be used for academic research.
The target population includes fashion consumers. These are people who buy or have bought fashion products online. The study focuses on individuals who might use AI-powered Virtual Try-On technology in fashion stores.

The research does not limit itself to one online retailer or platform. This helps the study get a view of how people feel about the technology in different online shopping environments.

6.3 Sampling Method

The study uses a -probability convenience sampling method. Respondents are contacted through networks and invited to take part in the survey. This method is suitable because the research needs people who can be reached online and who shop for fashion products online.

The final sample size depends on how many complete and usable responsesre gathered during the data-collection period.

6.4 Research Instrument

A structured questionnaire is the tool used for data collection. The questionnaire has two parts.

Section 1 gathers information about the respondents' background and shopping habits. This includes age group, gender, education level, job and how often they shop for fashion items online.

Section 2 includes 16 statements about how respondents think about AI-powered Virtual Try-On technology and how confident they feel when making fashion purchases. The statements are shown without naming the concepts behind them. This is done to avoid bias and let people answer honestly based on the statements themselves.

All statements are rated using a five-point Likert scale. The scale goes from 1 – Strongly Disagree to 5 – Strongly Agree.

6.5 Data Analysis

The responses are analysed using quantitative statistical methods. First descriptive statistics are used to describe the demographics of the participants and their answers to the questions.

Next advanced statistical methods are used to look at the links between the variables. Depending on the sample size and the nature of the data techniques like reliability analysis, correlation analysis and regression analysis may be used. These help to check if the measurement items are consistent and to test the relationships between the variables.

6.6 Ethical Consideration

Participation in the study is voluntary. Before starting the questionnaire respondents are told the purpose of the research. No personal information is collected so the identity of each participant remains private. The data will be used for academic research. It will not be. Used for any purpose, outside the study.

VII. RESULTS AND FINDINGS

This section illustrates the results of the data gathered from the survey conducted on 211 Indian online fashion consumers. The data was analysed through Jamovi to determine the relationship between the perceived usefulness, ease of use and realism and

accuracy of AI powered VTO technology and consumer confidence to purchase. This included conducting descriptive analysis, normality tests, reliability analysis, convergent and discriminant validity and multiple regression analysis.

7.1 Descriptive Analysis

Descriptive analysis shows us some key information about the demographic data of our respondents and how they perceive the AI powered VTO technology.

There were 211 respondents. The largest group was in the age range of 18-20 (31.3%) followed by 21-23 (21.3%). There were also a significant number of under 18s (16.1%), 24-26s (17.1%) and over 26s (14.2%). In terms of gender 35.1% are female, 29.4% are male, 18.0% are non-binary and 17.5% did not wish to state their gender.

Looking at the educational background of participants, the most common was undergraduates (38.4%) followed by postgraduates (24.2%), other qualifications (21.8%) and doctorates (15.6%). The occupation of students was most common (36.5%) followed by employed (23.7%), self-employed (17.1%), unemployed (13.3%) and other occupations (9.5%). In relation to how often they shop online, it was found that 31.3% of participants do frequently whilst 25.6% do very frequently. This totals to 56.9%.

The descriptive statistics indicated that the mean scores for each of the measurement items were generally higher than the middle point of the five-point Likert scale. This was the case for perceived usefulness (3.40-3.63), perceived ease of use (3.30-3.52), perceived realism and accuracy (3.32-3.49) and purchase confidence (3.41-3.55). Standard deviation for all measurement items ranged from 1.28 to 1.44. The overall findings show that participants had a moderately positive response to the perceived usefulness, ease of use, realism/accuracy and purchase confidence of AI powered VTO.

7.2 Test of Normality

To investigate normality within the study variables the Shapiro-Wilk test was performed. All variables displayed significant deviations from normality. Perceived usefulness had a W-value of 0.966 ($p<.001$). Perceived ease of use had a W-value of 0.973 ($p<.001$), Perceived realism & accuracy had a W value of 0.967 ($p<.001$). Purchase confidence had a W-value of 0.965 ($p<.001$).

The skewness and kurtosis values were not indicative of large deviations in the distribution shapes. The values for skewness ranged between -0.141 to 0.00897 whereas kurtosis values ranged between -0.740 to -0.516. This suggests there was not much asymmetry in the distribution. However, the significant p-values suggest that variables were not fully normally distributed.

7.3 Reliability Analysis

Cronbach's alpha was used to measure reliability. Perceived useful had a reliability score of 0.607, perceived ease of use had a reliability score of 0.597, perceived realism and accuracy had a reliability score of 0.652 and purchase confidence had a reliability score of 0.618.

While these are low scores showing that there is not much internal consistency in the measures, they are all above 0.30, so the correlation between the items and the rest of the scale is good. Additionally, removing any one item does not improve the Cronbach's alpha score for that item. All items have therefore been included in the analysis. However, consideration should be given to the reliability results when interpreting findings as there is not much internal consistency within the constructs.

7.4 Convergent and Discriminant Validity

Convergent validity was measured by calculating the Average Variance Extracted (AVE). The results show the AVE to be 0.330 for perceived usefulness, 0.305 for perceived ease of use, 0.378 for perceived realism and accuracy, and 0.350 for purchase confidence. As the results are all below the commonly accepted value of 0.50, the constructs do not have sufficient convergent validity.

Discriminant validity was measured using the Heterotrait-Monotrait (HTMT) ratio. The results are: Perceived usefulness and perceived ease of use = 0.901; Perceived usefulness and realism and accuracy = 0.900; Perceived usefulness and purchase confidence = 0.952; Perceived ease of use and realism and accuracy = 1.061; Perceived ease of use and purchase confidence = 0.901; Realism and accuracy and purchase confidence = 0.993.

Overall the HTMT values were all equal to or above the commonly used cut-off of 0.90. There was also a result of greater than 1.00 for the relationship between perceived ease of use and realism and accuracy. This suggests there is a large amount of overlap between the constructs meaning there is insufficient discriminant validity. Care should therefore be taken when interpreting the results.

7.5 Multiple Regression Analysis

A multiple regression analysis was performed to determine how perceived usefulness, perceived ease of use, and perceived realism and accuracy of the product individually and together predicted purchase confidence.

The overall regression model was statistically significant ($F(3, 207) = 61.8$, $p < .001$), with an R value of 0.688, R square of 0.473, and an adjusted R square of 0.465. This means that the three independent variables accounted for 47.3% of the variance in purchase confidence.

Looking at each regression result, it can be seen that there was a positive significant relationship between perceived usefulness and purchase confidence ($\beta=0.295$, $t=4.65$, $p<.001$). This supports hypothesis one. There was also a positive significant relationship between perceived ease of use and purchase confidence ($\beta=0.142$, $t=2.04$, $p=0.043$), therefore supporting hypothesis two. Finally there was a positive significant relationship between perceived realism and accuracy and purchase confidence ($\beta=0.363$, $t=5.15$, $p<.001$). This supports hypothesis three.

The variable with the highest standardised regression coefficient was perceived realism and accuracy, followed by perceived usefulness and then perceived ease of use. This suggests that the perceived realism and accuracy of apparel using the virtual try on technology is an important factor for respondents feeling confident to purchase.

The variance inflation factors for perceived usefulness, perceived ease of use and perceived realism and accuracy were 1.58, 1.91 and 1.96 respectively. This indicates that there isn't a large issue with multicollinearity between the independent variables. As the overall regression model is statistically significant and all three variables have positive statistically significant coefficients, H4 is also supported.

VIII. Conclusion

Background: The purpose of this study is to explore the relationship amongst AI based Virtual Try-On, Purchase Confidence of Indian consumers. The study aims to understand the influence of Perceived Usefulness, Ease of Use and Realism/Accuracy on Purchase Confidence. The results showed that all the three variables had a positive and significant effect on Purchase Confidence. (N=211)

Findings: The results of multiple regression analysis showed that there were three independent variables which explained 47.3% of variance in purchase confidence. The independent variable with the greatest effect was perceived realism/accuracy. Followed by perceived usefulness and ease of use. This indicates that purchase confidence can be linked to both perceived usefulness and ease of use of virtual try on when purchasing fashion items online, however the realism and accuracy of virtual try on has an impact on purchase confidence.

Practical Implications: These findings show the importance of developing useful, easy to use and realistic AI based VTO applications. This could be a consideration for fashion retailers and e-commerce businesses in India to improve the accuracy and usability of their virtual try on features to make customers feel more confident when shopping for garments online.

However, the limitations of the measurement model should be considered. The Cronbach's alpha showed low internal consistency and the AVE and HTMT failed to show sufficient convergent and discriminant validity. This therefore limits how strongly the relationships can be interpreted. Finally, the study only shows responses from the 211 participants and does not prove any causal relationships between the variables.

Overall, the study shows that AI-based virtual try on technology is relevant to consumer confidence in Indian online fashion shopping. It was found that perceived usefulness, ease of use and realism and accuracy all have a positive relationship to confidence. This provides useful information on how virtual try on technology can help improve the online apparel shopping experience.

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