https://doi.org/10.62674/ijabmr.2026.v3i03.004

International Journal of Advances in Business and Management Research (IJABMR)

https://ejournal.svgacademy.org/index.php/ijabmr/

OPEN ACCESS

IMPACT OF VIRTUAL TRY-ON FEATURES ON PURCHASE INTENTION IN ONLINE APPAREL SHOPPING

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Original Article

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Abstract

This research explores how virtual try-on technology impacts consumers' willingness to purchase apparel in an e-commerce environment. It focuses on the roles of interactivity, visual authenticity, and user-friendliness in shaping shoppers' perceptions of usefulness and trust. The study further analyses how these perceptions contribute to their overall willingness to make a purchase. This study collected responses from 224 consumers in Dakshina Kannada District, India, all of whom had previously used virtual try-on for online apparel purchases. The proposed conceptual framework was evaluated using partial least squares structural equation modelling (PLS-SEM) in the SmartPLS software, prioritising enhanced visual realism and the system's performance. These outcomes show perceived utility and trust are significantly increased by interactivity, realism, and ease of use. Among these, realism and usability are more important than interaction, indicating that enhancing these factors can lead to a greater impact on customer engagement and satisfaction. Additionally, customers' buying intention is greatly increased by perceived utility and trust, with trust being the more significant predictor. The structural model demonstrates a moderate explanatory capacity, accounting for 57.6% of the variance in purchase intention. Online apparel retailers should prioritise enhancing visual realism and the system's ease of use in virtual trial applications to strengthen consumer trust and perceived usefulness. Investments in accurate visualisations and user-friendly interfaces may significantly increase purchase intentions. By offering data relevant to a given region and explaining the psychological mechanisms via which technical features impact consumer decision-making, this study adds to the scant empirical literature on virtual try-on technology in online garment buying.

Keywords: Online Apparel Shopping; Perceived Usefulness; PLS-SEM; Purchase Intention; Trust; Virtual Try-On Technology

Introduction

The rapid growth of electronic commerce has transformed the way the retail methods are conducted worldwide, particularly in the garment industry, where customers have increasingly relied on online platforms to discover, evaluate, and purchase products [1, 2]. Online clothes buying offers convenience; however, the lack of physical inspection of products still raises concerns about fit, size, and appearances. This constraint often led to low consumer confidence and hesitation in the purchasing decisions [3, 4]. To overcome these problems, internet retail stores developed complex digital technologies that enabled shoppers to virtually interact with products before buying them. Among these developments, researchers can mention virtual tryout devices, which allow consumers to visualise clothing items

Received 26th February 2026; Revised 1st March 2026; Accepted 5th March 2026

through interactive and realistic simulations. These systems made use of three-dimensional visualisation and augmented reality techniques for helping consumers evaluate the suitability of a product and minimise perceived risk [5, 6].

Prior studies showed that these technological attributes enhanced user engagement and online buying experiences [7]. Previous studies examined the effects of digital systems' attributes on customers' psychological responses and behavioural intentions in online situations. Empirical evidence from regional Indian studies also confirms that perceived usefulness and trust act as key psychological mechanisms linking digital system attributes to behavioural intention across diverse platforms such as digital payments and e-governance services [8, 9]. Research indicated that interactive and user-friendly platforms had a positive impact on perceived usefulness and trust, which flowed to purchase-related results [10, 11]. Research shows that perceived usefulness plays a critical role in improving the quality of decisions and shopping efficiency, while trust helps build customer confidence on online platforms [5, 12]. The results showed that the technological characteristics alone were not associated directly with purchase behaviour unless they had a positive effect on the internal evaluation of the consumers. Several empirical studies have supported evidence that perceived usefulness and trust are found to be essential mechanisms that link digital tools and digital marketing activities toward purchase intentions [2, 13]. Nevertheless, most of this research has generally focused on social media marketing efforts or general digital platforms. Virtual try-on features were relatively low priority as a distinctive technology tool in online clothing shopping environments, which may hinder their effectiveness in enhancing perceived usefulness and trust compared to other digital marketing strategies.

Furthermore, most research to date looks at national or global samples, with a few studies examining localised consumer behaviour within specific areas. Furthermore, past scholarship has primarily focused on branding, engagement, and loyalty outcomes, while the direct effects of virtual try-on features on purchase intention through perceived usefulness and trust have not been adequately explored [5, 6]. As a result, there is still a dearth of empirical studies demonstrating how virtual try-on systems influence consumers' decision-making when they shop online for clothing. This study looked at how virtual try-on features affected consumers' intentions to buy clothes online. The impact of interactivity, realism, and ease of use on consumers' views of utility and trust—and how these perceptions in turn influenced their propensity to purchase clothing online—was specifically examined in this study. This study improved the body of knowledge on digital retail technology by using a quantitative and cross-sectional research approach to provide empirical data regarding the impact of virtual try-on systems on consumer decision-making.

Literature Review

Previous research demonstrated that virtual try-out systems enable consumers to visualise products in simulated settings, thus diminishing ambiguity concerning fit, size, and appearance [5, 6]. These devices were developed to promote consumer confidence and facilitate informed decision-making by enabling product visualisation prior to purchase. Subsequent research indicated that engaging and immersive digital applications enhanced user engagement and fostered more favourable purchasing experiences [7]. Malarvizhi et al. [3] discovered that sophisticated digital tools diminished perceived risk and enhanced customers' assessment of online products. Notwithstanding these findings, many current studies have analysed digital marketing tools in a general manner, with little focus on the distinct technological attributes of virtual try-on systems in online garment environments.

Virtual Try-On Features

Virtual try-on features denote the practical and aesthetic attributes that influence user interaction with the system. These attributes typically encompass interactivity, realism, and user-friendliness. Interactivity denotes the extent to which people can govern and modify digital content. Previous studies indicated that interactive settings increased user engagement and improved assessments of online platforms [5, 7]. Realism denotes the precision and veracity of visual depictions, enhancing product comprehension and diminishing information asymmetry [14]. Ease of use denotes the simplicity and effort necessary to run a digital system, and it has been recognised as a pivotal factor in technology acceptance [15]. Banerji & Singh [10], and ElSayad & Md. Saad [11] indicated that well-developed digital system attributes, such as realism and ease of use, favourably impacted consumers' perceptions and behavioural reactions, leading to increased acceptance and engagement with the technology.

Perceived Usefulness

In digital contexts, it is generally accepted as a significant determinant of behavioural intention and technology adoption. Prior research indicated that interactive digital systems enhanced perceived utility by enabling product assessment and comparison [2, 5]. Malarvizhi et al. [3] indicated that beneficial digital platforms increased consumers' confidence and propensity to engage in online transactions. Likewise, Al-Hujri et al. [13] discovered that perceived usefulness enhanced favourable views towards digital services and augmented behavioural effects. Farzin et al. [12] found that consumers who saw online tools as advantageous and time-efficient were more inclined to use them for purchase decisions. In the realm of virtual try-ons, utility may stem from enhanced size estimates, superior visualisation, and less purchasing uncertainty. Nonetheless, empirical studies particularly investigating the perceived usefulness of virtual try-on features are scarce.

Trust in Online Apparel Shopping

Trust denotes consumers' assurance in the dependability, authenticity, and integrity of digital platforms. In digital retail settings, trust is paramount as transactions transpire without physical engagement. Irshad et al. [16] and Banerji & Singh [10] demonstrated that trust significantly influenced customers' likelihood of engaging in online transactions. ElSayad & Md Saad [11] discovered that reliable digital platforms enhanced consumer interactions and repurchase tendencies. Hanaysha [7] reported that digital marketing attributes augmented brand trust, which subsequently affected purchasing decisions. Trust in digital contexts is frequently established by system stability, precise information, and consistent performance [5, 6]. Realistic virtual try-on capabilities that offer seamless functionality may therefore bolster consumer trust in online garment businesses. Nevertheless, little research has directly investigated the correlation between virtual try-on attributes and the development of trust.

Purchase Intention

Purchase intentions are regarded as a robust indicator of genuine buying behaviour. Sharma et al. [2] and Shuyi et al. [17] indicated that digital marketing initiatives and system attributes substantially affected purchase intention, suggesting that effective marketing strategies and user-friendly system features can lead to increased consumer interest and likelihood of making a purchase. Koay et al. [5] discovered that favourable impressions of digital platforms enhanced purchase intentions via mediating processes. Farzin et al. [12] observed that favourable online experiences increased consumers' likelihood of making a purchase. In the case of clothes, Menon [4] and Singh & Dagur [18] established that digital interaction and platform trustworthiness positively affected purchasing decisions. While previous studies have associated digital tools with purchase intention, empirical research explicitly investigating virtual try-on features in online garment purchasing is lacking, particularly regarding how these features influence consumer confidence and decision-making processes. In e-commerce contexts, satisfaction and perceived value have also been shown to significantly drive repurchase intention [19], highlighting the broader importance of internal evaluations in shaping online buying decisions.

Theoretical Foundation

This study was based on the Stimulus–Organism–Response (SOR) framework. It describes how internal psychological states, which in turn influence behavioural reactions, are influenced by external environmental stimuli. The SOR model has been extensively employed in digital marketing research to investigate ways in which technology attributes impact consumer perceptions and intentions [6, 10]. In online retail settings, system attributes serve as triggers that affect internal assessments, like perceived usefulness and trust, which then dictate behavioural outcomes, such as purchase intention [5, 7]. Within this approach, virtual try-on characteristics were conceptualised as stimuli, perceived utility and trust were organismal factors, and purchase intention was the response variable. Similar behavioural sequencing has been empirically validated in prior TAM-based and DOI-integrated frameworks across digital payment, e-governance, and agricultural technology contexts, where system attributes influenced internal perceptions, which subsequently shaped behavioural intention [8, 20].

Hypotheses Development

- **Virtual Try-On Features and Perceived Usefulness**
  Interactive and user-friendly digital platforms have shown an improvement in the perceived usefulness through refinement of the product evaluation process [3, 15]. Koay et al. [5] suggested an improved perception of system utility, while Hanaysha [7] found immersive digital environments supported information evaluation. The ease of use for the system has been shown to reduce cognitive effort and increase perceived value [13, 15], which supports the hypothesis that interactivity positively influences perceived usefulness.

  Accordingly:

  H_1: Interactivity positively influences perceived usefulness.

  H_2: Realism positively influences perceived usefulness.

  H_3: Ease of use positively influences perceived usefulness.

- **Virtual Try-On Features and Trust**
  Trust is strengthened when digital systems provide reliable and accurate information [5, 11]. Hanaysha [7] demonstrated that interactive features enhanced transparency and user confidence. Banerji & Singh [10] and Safeer [6] found that technological stimuli positively influenced trust formation, particularly through mechanisms such as user engagement and feedback loops that reinforce reliability and transparency.

  Thus:

  H_4: Interactivity positively influences trust.

  H_5: Realism positively influences trust.

  H_6: Ease of use positively influences trust.

- **Perceived Usefulness, Trust, and Purchase Intention**
  Perceived usefulness and trust have consistently been identified as predictors of purchase intention in digital contexts [5, 10]. Farzin et al. [12] and Sharma et al. [2] found that positive evaluations of digital platforms increased buying intention. El Shayad & MD Shad [11] reported that trust reduced perceived risk and encouraged online purchases.

  Therefore:

  H_7: Perceived usefulness positively influences purchase intention.

  H_8: Trust positively influences purchase intention.

Methodology

Research Design

In the context of online clothing selling, this research used a quantitative methodology to investigate the connections between virtual try-on qualities, perceived utility, trust, and consumers' buying intentions. Using a deductive method, ideas and previous empirical findings were used to generate hypotheses, which were then evaluated using the data gathered. The study, which was based on a positivist framework, collected responses at one moment. This method was judged appropriate for evaluating the attitudes and intentions of customers in technologically enabled retail settings [2, 5].

Population and Sampling Technique

The study was limited to the Dakshina Kannada District in India and focused on customers who had previously utilised virtual try-on features for online clothing purchases. The published guidelines for Partial Least Squares Structural Equation Modelling (PLS-SEM) were used to estimate the minimal sample size, incorporating not only the widely referenced ten-times rule but also contemporary methodological recommendations that advocate conducting statistical power analysis and employing advanced estimation techniques to ensure adequate statistical power and robust findings [21, 22, 23]. A final usable sample of 224 respondents exceeded the minimum needed to achieve reliable model estimation and hypothesis testing.

Instrument Development and Measurement

A systematic, self-administered questionnaire created by modifying established measurement scales from prior research was employed for data collection. The perceived utility questions were taken from Koay et al. [5] and Sharma et al. [2], while the items measuring virtual try-on features were modified from studies by Yadav & Rahman [15] and Koay et al. [5]. Purchase intention items were taken from Koay et al. [5] and Sharma et al. [2], while measures of trust were based on Irshad et al. [16] and Banerji & Singh [10]. Four elements made up the questionnaire: user perceptions, purchasing intention, virtual try-on features, and demographic information.

Data Collection Procedure

Overall, 300 questionnaires were provided to potential respondents for data collection using offline means and email communication after purposive sampling procedures. Participation in the poll was limited to individuals who had prior experience utilising virtual try-out capabilities to purchase clothing online. After data collection, all responses were evaluated in terms of completeness and quality. Questionnaires with incomplete or no replies for whole constructs have been eliminated. As a result, 76 questions were removed during the screening process. Researchers preserved a total of 224 questionnaires for final analysis, which were either filled or had only one or two missing items. Minimal missing values in the retained questionnaires were addressed by mean substitution to ensure data completeness and maintain sample size.

Data Analysis Technique

The data were examined in SmartPLS using the partial least squares structural equation model (PLS-SEM). It was chosen because it works well with sophisticated research models, is suitable for prediction-focused research, and is robust when the data distribution is not normal [21]. The text was analysed in two steps. The first step examined the discriminant validity of the measurement model, convergence, indicators, internal consistency, and reliability. In the second step, the structural model was used to investigate the connections among the proposed constructs. The importance of the path coefficients could be ascertained by bootstrapping many resamples.

Reliability and Validity Assessment

Convergent validity was tested using the average variance extracted (AVE), and discriminant validity was tested using the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio, as recommended by Hair et al. [21]. These methods have made sure that the measuring tools meet the quality standards required before the structural relationship between the constructs was determined.

Ethical Considerations

The research was performed using established ethical standards. Participants were free to discontinue participation at any moment without facing any costs or obligations. The survey was designed to collect no personally identifiable information to protect the anonymity of the respondents. All collected data was securely managed and used exclusively for academic purposes to protect participant confidentiality. Additionally, the study complied with the rules and ethical standards established by the relevant institutional structure.

Result

The empirical findings from the examination of the information gathered from 224 respondents are presented in this part. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), the findings are reported through descriptive statistics, measurement model analysis, and structural model assessment.

Respondent Profile

The distribution of the sample according to gender, age group, educational attainment, occupation, monthly income, and frequency of online clothing purchases is summarised in Table 1.

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	122	54.5
	Female	102	45.5
	Total	**224**	**100.0**
Age Group (Years)	18–27	102	45.5
	28–37	68	30.4
	38–47	24	10.7
	47 and above	30	13.4
	Total	**224**	**100.0**
Educational Qualification	PUC	14	6.3
	Diploma	20	8.9
	Graduate	112	50.0
	Postgraduate	60	26.8
	Doctorate	18	8.0
	Total	**224**	**100.0**
Occupation	Student	90	40.2
	Private Employee	72	32.1
	Government Employee	22	9.8
	Business/Self-employed	24	10.7
	Homemaker	12	5.4
	Retired	4	1.8
	Total	**224**	**100.0**
Monthly Income (₹)	Below 20,000	32	15.2
	20,000–50,000	110	26.8
	50,000–1,00,000	62	32.1
	1,00,000 and above	20	17.9
	Total	**224**	**100.0**
Frequency of Online Apparel Shopping	Rarely	24	10.7
	Occasionally	48	21.4
	Monthly	78	34.8
	2–3 times/month	56	25.0
	Weekly	18	8.0
	Total	**224**	**100.0**

Note: n = 224. Percentages are calculated based on valid responses. Due to rounding, some percentages may not sum exactly to 100%.

Source: Collected by Author

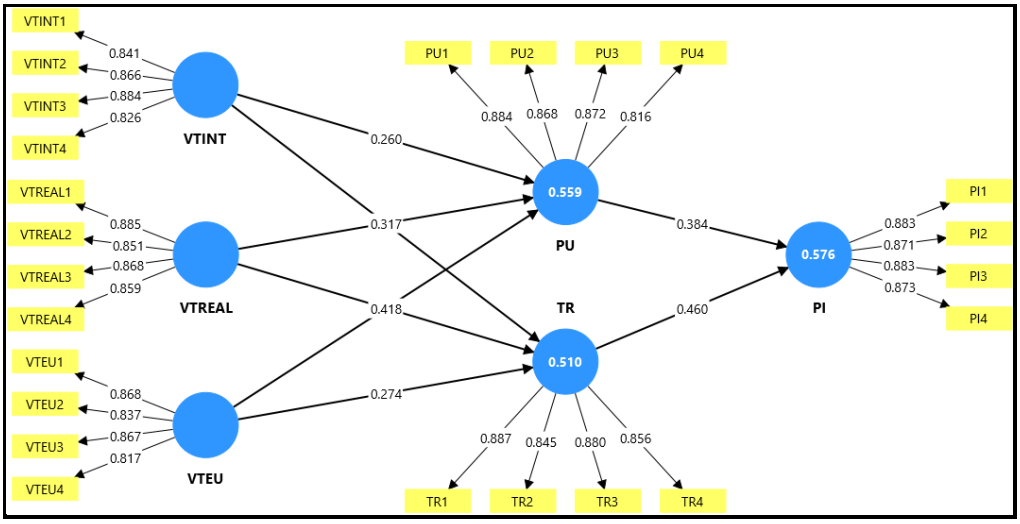
This demographic analysis shows that many of the respondents are young adults, with 45.5% aged 18-27 and 30.4% aged 28-37, so virtual try-on features are used by younger consumers. The sample had a relatively balanced gender distribution, with 54.5% of participants identifying as male and 45.5% as female. Many respondents had a high level of education, with 50.0% holding a graduate degree and 26.8% holding a postgraduate degree, indicating a digitally literate user demographic. The major occupational groups were students (40.2%) and private employees (32.1%), indicating that the youth and salaried people are the main users of online apparel platforms. Most of the people were in the middle-income category, namely Rs. 50,000 - 100,000 (32.1%) and Rs. 20,000 - 50,000 (26.8%). A considerable percentage

said that they buy clothes monthly (34.8%) or 2-3 times a month (25.0%), implying a high participation in online clothes acquisition.

Measurement Model Analysis

The measurement model first assessed the validity of latent constructs and their reliability, followed by an evaluation of the structural relationships. In line with what is recommended by Hair et al. [21], the measures involved indicator reliability, convergent validity and discriminant validity. The measurement model framework is shown in Figure 1.

Figure 1: Measurement Model



Source: Collected by Author

Indicator Reliability

The standardised outer loads of the measurement items were examined to determine indicator reliability. Figure 1 indicates that all indicators had loadings between 0.816 and 0.887, surpassing the recommended threshold of 0.70.

Internal Consistency Reliability and Convergent Validity

Convergent validity and internal consistency reliability were tested with Cronbach's alpha and composite reliability; the recommended threshold was 0.70 or higher, and 0.50 or higher was the minimum acceptable threshold value of average variance extracted (AVE), which was set at 0.70 [21]. Table 2 displays the related outcomes.

Table 2: Reliability and Convergent Validity

Construct	**Cronbach's Alpha**	**Composite Reliability** (rho_A)	**AVE**
PI	0.901	0.901	0.770
PU	0.883	0.886	0.741
TR	0.890	0.893	0.752
VTEU	0.870	0.879	0.718
VTINT	0.877	0.878	0.730
VTREAL	0.889	0.891	0.750

Source: Collected by Author

The constructions were found to be highly reliable, whereby Cronbach's alpha values are within the ranges of 0.870-0.901, which is much higher than the recommended minimum of 0.70. A high level of internal consistency was also evidenced by the composite reliability values of 0.911-0.931. In addition, the AVE values (0.718–0.770) were higher than the recommended cutoff (0.50), proving sufficient convergent validity.

Discriminant Validity

The heterotrait–monotrait (HTMT) ratio of correlations was used to assess discriminant validity. HTMT values must stay below the suggested cutoffs of 0.85 under the more stringent criterion or 0.90 under the more liberal criterion to demonstrate discriminant validity [21, 24]. Table 3 displays the relevant results.

Table 3: HTMT Ratios

	PI	PU	TR	VTEU	VTINT	VTREAL
PI	—					
PU	0.747	—				
TR	0.775	0.691	—			
VTEU	0.561	0.691	0.581	—		
VTINT	0.539	0.629	0.577	0.475	—	
VTREAL	0.655	0.634	0.682	0.409	0.465	—

Source: Collected by Author

All HTMT values, which ranged from 0.409 to 0.775, were judged to be below the cautious threshold of 0.85.

Structural Model Analysis

The structural model underwent analysis to test the hypothesised relationships between the features of virtual try-ons and perceived usefulness, trust, and purchase intention [25]. It was evaluated based on the known PLS-SEM assessment steps, such as collinearity, the presence of path coefficients, a check of the coefficient of determination (R^2), and the evaluation of effect sizes (f^2) presented by Hair et al. [21].

Collinearity Assessment

Predictor constructs were evaluated as collinear based on the values of the variance inflation factor (VIF). VIF below 5.0 indicates that the issue of collinearity is not acute in PLS-SEM analysis, but the values below 3.3 are considered more conservative and advantageous [21]. The corresponding results are reported in Table 4.

Table 4: Inner VIF Values

Relationship	VIF
PU → PI	1.612
TR → PI	1.612
VTEU → PU	1.286
VTEU → TR	1.286
VTINT → PU	1.343
VTINT → TR	1.343
VTREAL → PU	1.271
VTREAL → TR	1.271
Note: VIF = Variance Inflation Factor. All values are below the recommended threshold of 5.0 [21], indicating no multicollinearity concerns.	

Source: Collected by Author

Hypothesis Testing

To test the proposed relationships, SmartPLS bootstrapping procedures were employed. Table 5 presents the results.

Table 5: Structural Path Coefficients

Hypothesis	Path	β (O)	*t*-value	*p*-value	Result
H_1	VTINT → PU	0.260	4.857	0.000	Supported
H_2	VTREAL → PU	0.317	6.058	0.000	Supported
H_3	VTEU → PU	0.386	6.829	0.000	Supported
H_4	VTINT → TR	0.221	4.153	0.000	Supported
H_5	VTREAL → TR	0.418	8.085	0.000	Supported
H_6	VTEU → TR	0.274	4.865	0.000	Supported

H_7	PU → PI	0.384	6.425	0.000	Supported
H_8	TR → PI	0.460	7.582	0.000	Supported
Note: β = Standardized path coefficient; O = Original sample; significance assessed using bootstrapping; *p* < 0.05 indicates statistical significance.					

Source: Collected by Author

It was discovered that all eight of the proposed connections were statistically significant and positive. The three features of virtual try-on that greatly raised perceived utility and trust were usability, realism, and interactivity. It was subsequently discovered that perceived utility was significantly affected by the three features. The finding was empirical support for hypotheses H_1 through H_8, which proposed that usability, realism, and interactivity positively influence perceived utility and trust in virtual try-on technologies.

Coefficient of Determination (R^2)

The Coefficient of determination (R^2) was used to determine the predictive power of the model. The levels of explanatory power represented by R^2 of 0.75, 0.50 and 0.25 are significant, moderate, and poor respectively [21]. Table 6 shows the relevant R^2 results.

Table 6: Coefficient of Determination (R^2)

Endogenous Construct	**R^2**
Purchase Intention (PI)	0.576
Perceived Usefulness (PU)	0.559
Trust (TR)	0.510
Note: R^2 represents the proportion of variance explained in the endogenous construct. Values of 0.25, 0.50, and 0.75 indicate weak, moderate, and substantial explanatory power [21].	

Source: Collected by Author

The model explains 57.6% of the variance in purchase intention, 55.9% in perceived usefulness, and 51.0% in trust, indicating moderate explanatory power.

Effect Size (f^2)

Effect sizes were calculated (f^2) to determine the proportional contribution of each exogenous construct to the endogenous variables. According to Hair et al. [21], f^2 values of 0.02, 0.15 and 0.35 point to modest, medium and large effects. Table 7 displays the specific outcomes.

Table 7: Effect Size (f^2)

Relationship	**f^2**	**Effect Size**
PU → PI	0.216	Medium
TR → PI	0.309	Medium
VTEU → PU	0.262	Medium
VTEU → TR	0.120	Small
VTINT → PU	0.114	Small
VTINT → TR	0.074	Small
VTREAL → PU	0.180	Medium
VTREAL → TR	0.281	Medium
Note: f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively.		

Source: Collected by Author

This finding shows purchase intention was moderately impacted by perceived utility and trust. Realism and usability had moderate effects on perceived usefulness and trust among the virtual try-on characteristics, whereas interactivity had modest to moderate effects.

Discussion

The data indicated that interactivity, realism, and ease of use had a significant impact on perceived utility in relation to H_1–H_3. Among these attributes, ease of use and realism had comparatively greater effects, as shown by the moderate f^2 values. This finding shows that customers value system simplicity and visual accuracy when calculating the utility of virtual try-on aids. These results are consistent with the previous studies identifying the importance of ease of use and quality of interface in affecting perceptions of value [5, 15]. The model accounted for 55.9 per cent variance in the usefulness perceived by the user. Regarding H_4, the findings from H_6 indicate that engagement and realism significantly impact confidence in online apparel platforms. The most significant impact on trust was provided by realism, which was supported by its relatively high f2 value. This result makes the case for accurate and reliable visual representation in building consumer confidence. This discovery supports other research on the importance of system dependability and transparency in the building of confidence [10, 11], suggesting that consumers are more likely to trust systems that are both reliable and transparent in their operations. The model explained 51.0% variance in trust, indicating moderate explanatory power of explanatory efficacy. Regarding H_7 and H_8, perceived usefulness and trust had strong positive effects on the purchase intention [25]. This result suggests that although the practical benefits are important, consumer confidence in the platform is a more important driver of online transactions. This result is consistent with previous literature highlighting the importance of trust in online purchasing behaviours [2, 5]. The model explained 57.6% variance in purchase intention, and hence it has strong predictive efficacy in online clothing shopping. The combined results of route coefficients, effect sizes, and explained variance make it clear that features of virtual try-on have a significant impact on consumer internal perceptions and intentions to buy. The results support the theoretical premise that the qualities of technology are outside cues that affect inside cognitive processes and behavioural consequences, which, in turn, support the importance of behavioural frameworks in technology-mediated consumption situations.

Theoretical Implications

This research enhances the literature of digital marketing and electronic commerce in several ways. First, it provides empirical data for the isolated contribution of interactivity and realism, so it builds on previous studies that focused on more general digital tools. Secondly, by observing substantial explained variance in perceived utility, trust, and purchase intention, the results highlight theoretical understanding of the role of virtual technologies in shaping consumers' decision-making processes. The results confirm that internal assessments are considered crucial processes by which technical attributes influence behavioural outcomes. The study highlights the different influences of the virtual try-on elements, showing that realism and ease of use are more important than interaction, which suggests that enhancing these aspects could lead to higher consumer engagement and satisfaction in online clothing environments. The finding allows improvements in current theoretical models, in the sense of identifying the most significant technology characteristics of online clothing environments.

Managerial Implications

The findings provide explicit direction for online clothing sellers as well as technology companies. Investment in realistic and accurate virtual try-out systems should be given priority, as realism has shown a substantial impact on trust as well as perceived utility. Improving visual quality and size accuracy can provide an extra boost of consumer confidence and make perceived danger less of an issue. A moderate impact means that streamlining the interface and reducing the technical level of complexity may have a significant impact on improving customer assessments. Although the beneficial effect of interactivity is clear, the very minor effect suggests that too many interactive elements may not significantly influence consumers' purchase intention. Retailers should consequently balance involvement with simplicity. Fourth, marketing strategies will need to focus on the reliability and practical benefits of virtual try-on technologies to improve trust and increase purchasing behaviour.

Limitations

The use of selective sampling and localised data collection may limit the generalisability of findings related to factors such as age, income level, and purchasing habits. Subsequent study can be done using probability sampling and the cross-regional method. Consequently, longitudinal studies could be performed to explore how consumer attitudes

change over time. Subsequent study may include supplementary internal variables, such as felt enjoyment or emotional engagement, to augment explanatory power. Furthermore, the moderating effects of demographic and behavioural factors can be explored to increase understanding of various consumer responses.

Conclusion

This study examined the influence of virtual try-on features on consumers' purchase intention in online apparel shopping using the Stimulus–Organism–Response (SOR) framework. The findings indicate that key virtual try-on attributes—interactivity, realism, and ease of use—significantly enhance consumers' perceptions of usefulness and trust in online apparel platforms. Among these features, realism and ease of use demonstrated comparatively stronger effects, suggesting that accurate visual representation and user-friendly system design are key factors that determine positive consumer evaluations. The results further reveal that perceived usefulness and trust significantly influence purchase intention, with trust emerging as the stronger predictor of consumers' willingness to buy apparel online. These findings highlight that while the functional benefits of virtual try-on technology improve decision-making efficiency, consumer confidence in the platform remains essential for encouraging online transactions. The model also demonstrated moderate explanatory power, explaining a substantial proportion of variance in purchase intention, perceived usefulness, and trust. Overall, the study contributes to the growing literature on digital retail technologies by empirically demonstrating how specific technological attributes shape consumers' internal perceptions and behavioural intentions. From a practical perspective, the findings suggest that online apparel retailers should prioritise improving the realism and usability of virtual try-on systems to strengthen consumer trust, enhance perceived value, and ultimately increase purchase intent in online shopping environments.

Conflict of Interest

The authors declare that they have no conflict of interest.

Acknowledgement

The authors are thankful to the institutional authority for completion of the work.

References

1. Koay KY, Cheah CW. Understanding consumers' intention to revisit bubble tea stores: an application of the theory of planned behaviour. British Food Journal. 2023 Feb 9;125(3):994-1007. https://doi.org/10.1108/BFJ-01-2022-0025

2. Sharma A, Fadahunsi A, Abbas H, Pathak VK. A multi-analytic approach to predict social media marketing influence on consumer purchase intention. Journal of Indian Business Research. 2022 May 17;14(2):125-49. https://doi.org/10.1108/JIBR-08-2021-0313

3. Malarvizhi CA, Al Mamun A, Jayashree S, Naznen F, Abir T. Modelling the significance of social media marketing activities, brand equity and loyalty to predict consumers' willingness to pay premium price for portable tech gadgets. Heliyon. 2022 Aug 1;8(8). https://doi.org/10.1016/j.heliyon.2022.e10145

4. Menon PB. Influence of social media marketing efforts on brand equity and consumer response to branded shoes in India. Indian Journal of Marketing. 2021 Sep 30:24-40. https://doi.org/10.17010/ijom/2021/v51/i9/166162

5. Koay KY, Cheah CW, Goon SW. How do perceived social media marketing activities foster purchase intentions? A multiple sequential mediation model. Journal of Global Marketing. 2023 May 27;36(3):210-24. https://doi.org/10.1080/08911762.2023.2207072

6. Safeer AA. Harnessing the power of brand social media marketing on consumer online impulse buying intentions: a stimulus-organism-response framework. Journal of Product & Brand Management. 2024 Aug 5;33(5):533-44. https://doi.org/10.1108/JPBM-07-2023-4619

7. Hanaysha JR. Impact of social media marketing features on consumer's purchase decision in the fast-food industry: Brand trust as a mediator. International journal of information management data insights. 2022 Nov 1;2(2):100102. https://doi.org/10.1016/j.jjimei.2022.100102

8. Aparna K. Factors Influencing Unified Payments Interface Adoption Among Hawkers in Mangaluru: An Extended Technology Acceptance Model Approach. Asian Journal of Managerial Science. 2024 Oct 15;13(2):45-51. https://doi.org/10.70112/ajms-2024.13.2.4250

9. Raghavendra R, Shruthi N. Factors influencing behavioural intention to use DigiLocker among users in Mangaluru City: an extended technology acceptance model approach. *Int J Case Stud Bus IT Educ.* 2025;9(1):1-19. https://doi.org/10.5281/zenodo.14854760

10. Banerji R, Singh A. Do social media marketing activities promote customer loyalty? A study on the e-commerce industry. LBS Journal of Management & Research. 2024 Jul 10;22(1):93-109. https://doi.org/10.1108/LBSJMR-04-2023-0016

11. ElSayad G, Md Saad NH. Unmasking the power of social media marketing activities in cultivating customer equity, loyalty, and repurchase intention. Journal of Marketing Communications. 2024 Nov 22:1-21. https://doi.org/10.1080/13527266.2024.2432029

12. Farzin M, Sadeghi M, Fattahi M, Eghbal MR. Effect of social media marketing and eWOM on willingness to pay in the etailing: Mediating role of brand equity and brand identity. Business Perspectives and Research. 2022 Sep;10(3):327-43. https://doi.org/10.1177/22785337211024926

13. Al-Hujri A, Al-Hakimi MA, Alshageri S, Vasant Keshavrao B, Al Koliby IS. The impact of social media marketing activities on brand loyalty and awareness: The mediating role of customer satisfaction in Yemen's telecom industry. Cogent Business & Management. 2025 Dec 12;12(1):2509793. https://doi.org/10.1080/23311975.2025.2509793

14. Zarei A, Farjoo H, Bagheri Garabollagh H. How social media marketing activities (SMMAs) and brand equity affect the customer's response: does overall flow moderate it?. Journal of Internet Commerce. 2022 Apr 3;21(2):160-82. https://doi.org/10.1080/15332861.2021.1955461

15. Yadav M, Rahman Z. Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. Telematics and informatics. 2017 Nov 1;34(7):1294-307. https://doi.org/10.1016/j.tele.2017.06.001

16. Irshad M, Ahmad MS, Malik OF. Understanding consumers' trust in social media marketing environment. International Journal of Retail & Distribution Management. 2020 Oct 10;48(11):1195-212. https://doi.org/10.1108/IJRDM-07-2019-0225

17. Shuyi J, Mamun AA, Naznen F. Social media marketing activities on brand equity and purchase intention among Chinese smartphone consumers during COVID-19. Journal of Science and Technology Policy Management. 2024 Jan 25;15(2):331-52. https://doi.org/10.1108/JSTPM-02-2022-0038

18. Singh B, Dagur A. Understanding influence of social media marketing of masstige fashion brands on generation Z female Indian consumers. Indian Journal of Marketing. 2022 May 1:8-24. https://doi.org/10.17010/ijom/2022/v52/i5/169414

19. Sheethal K. A Study on Consumer Satisfaction and Repurchase Intention in E-Commerce in Dakshina Kannada, Karnataka, India. Asian Journal of Managerial Science. 2025 Aug 5;14(2):10-8. https://doi.org/10.70112/ajms-2025.14.2.4281

20. Suvarni S, Deeksha D. Adoption of Climate-Smart Agriculture Technologies by Agripreneurs: An Integrated DOI and TAM Approach. International Journal of Advances in Business and Management Research (IJABMR). 2025 Sep 12;3(1):46-66. https://doi.org/10.62674/ijabmr.2025.v3i01.005

21. Hair JF, Hult GT, Ringle CM, Sarstedt M, Danks NP, Ray S. Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer international publishing; 2021. https://doi.org/10.1007/978-3-030-80519-7

22. Suvarni S, Deeksha D. Adoption of Climate-Smart Agriculture Technologies by Agripreneurs: An Integrated DOI and TAM Approach. International Journal of Advances in Business and Management Research (IJABMR). 2025 Sep 12;3(1):46-66. https://doi.org/10.62674/ijabmr.2025.v3i01.005

23. Kock N, Hadaya P. Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. Information systems journal. 2018 Jan;28(1):227-61. https://doi.org/10.1111/isj.12131

24. Henseler J, Ringle CM, Sarstedt M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the academy of marketing science. 2015 Jan;43(1):115-35. https://doi.org/10.1007/s11747-014-0403-8

25. Thejaswini MC, Wright R. How Tier 2 Shoppers Adopt Online Shopping After COVID-19: A Conceptual Study. International Journal of Advances in Business and Management Research (IJABMR). 2025 Dec 12;3(2):70-81. https://doi.org/10.62674/ijabmr.2025.v3i02.007