

Augmented Reality in Retail: Exploring the Mediating Role of Attitude on Purchase Intention in Home Décor and Furnishings

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Abstract

Purpose: Amalgamation of real and virtual worlds has been an area of interest for many developers as well as researchers. The impact of Augmented Reality (AR) in enhancing customer experience indicates a positive development in retail sector. This paper intends to study the influence of Augmented Reality applications on consumer purchase intention in home décor and furnishings.

Design/methodology/approach: To understand the extent of adoption of AR apps for purchase of furniture, the study uses UTAUT model. Since attitude has the scope of influencing behaviors and changing consumer habits, hence impact of attitude over purchase intention has been studied. As app interface provides a bridge between user and the retailer, hence its role in shaping consumer behavior along with consumer inclination towards usage of such technologies have been studied. Incorporating judgement sampling, 383 responses were collected using a structured undisguised questionnaire. The results were analyzed using PLS SEM technique.

Findings: The study suggests that there is high adoption of interactive technologies like Augmented Reality for home décor and furnishings. Augmented Reality has high value addition for retail customers. As AR is an unexplored field in the furniture retail sector, it has high impact generation capabilities. The study also indicates that performance expectancy (PE) and effort expectancy (EE) have the highest impact on consumer attitude towards purchase intention. Furthermore, peers and technology-related factors have negligible influence on consumer attitude.

Originality: Retail seems to be an unexplored area of research for AR implementation. Especially in the Indian context, the exploration has been very limited. AR has the ability to fully capture the customer's mind while enriching their buying experience. The study can provide great insights for furniture retailers in imbibing AR features for creating best consumer experiences.

Keywords: *Augmented Reality, Furniture, Retail, Online Shopping, Interactive, Technology, IKEA, PLS SEM, UTAUT*

1 Introduction

The marketing realm has been widening its horizons by focusing on catering to consumer opinions and constant feedback. Traditionally, marketing involved using different mediums to reach out to the consumer whilst emphasizing on benefits and features of the product or service offering. Therefore, the purchase decision was mostly based on the information provided. On the contrary, emerging technologies combine consumer psychographics to create pleasurable experiences by enforcing consumer participation, thereby, enabling the customers to make rationally informed choices [1]. Thus, traditional techniques are seemingly becoming redundant with the advent of new practices.

Over the last decade evolution in ecommerce and online retailing has been attributed towards strengthening any nation's economic status. In today's era retail sector is thrilling and complex yet an important growth parameter for major growing economies all over the globe. The online retail market in India would reach an estimate of 350 billion US Dollars by the year 2030. Further, owing to rise in online shoppers, online retail is expected to strengthen its roots in 2024 with a sharp rise from 4.7% in 2019 to 10.7% ending 2024 [2]. This has been boosted by economic performance, increased smartphone penetration and presence of younger generation.

The unanticipated digital adoption in 2020 fostered the growth of e-commerce at a much faster pace. Peak pandemic days led to a change in consumer attitude impacting consumption patterns resulting in seamless

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R. Nagariya et al. (eds.), *Proceedings of the International Conference on Sustainable Business Practices and Innovative Models (ICSBPIM-2025)*, Advances in Economics, Business and Management Research 349,
https://doi.org/10.2991/978-94-6463-872-1_61

transition from offline to online buying [3] Retail has swiftly shifted to a worldwide borderless, channel-agnostic landscape compelling brands to revamp their product assortment as well as pricing strategies whilst imbibing analytics for digital channels [3]. AR has placed itself as a differentiating element in simplifying customer choices over different brands and products [4].

Since AR provides scope to its customers to virtually experiment and explore several versions of their personality, the mental stimulation creates a sense of belongingness during the shopping experience which further increases their self-confidence in terms of user image enhancement via virtual self-experimentation [5]. In the absence of AR such trials by consumer would have been a remote possibility. Thus, increase in consumer confidence over certain products had led to greater significance of AR in retail.

Augmented reality is expected to become a major influencer in planning, decision making and the way organizations interact with their consumers [6]. In current retail setting the customers tend to get attracted to the unique interface making the buying experience memorable and much more impactful [7]. Whilst this is true, but majority retailers are still not prepared to inculcate augmented reality into their business process.

There is a mixed line of thought over usage, adoption and outcome of AR applications in retail. In retail sector implications of AR are yet to be explored. Until 2016, majority of published AR research has focused on peripherals, supporting technology and experimental prototype applications. The current augmented reality research is focused on technological and application implications emphasizing on retailer adoption challenges to develop an effective integrated AR system. However, the impact of AR interfaces on user experience is still missing. In the Indian context, the market is highly unorganized with only few organised brands in the sector. Also, within the Indian context itself the research has been generic concentrating on understanding customer awareness of augmented reality [8][9]. Research into human cognition and how it interacts with AR has only been theorized with no concrete and substantial outcome for retailers to implement.

This research aims to study the impact of augmented reality applications on consumer purchase intention in home décor and furnishings. This research intends to bridge the gap between barriers to technology implementation and consumer adoption. As the retailers embrace new technology while aiming at enriching the consumer experience, it is imperative to understand the implications of implementation of AR to create a win-win situation for retailers as well as the customers. The objectives of the study are as follows:

- To analyse the impact of augmented reality applications on consumer purchase intention in Home Décor and Furnishings:
 - To examine the extent of consumer awareness on augmented reality applications
 - To identify the factors influencing customer attitude towards augmented reality applications
 - To understand the mediating impact of attitude on purchase intention
 - To assess the moderating role of app interface on customer attitude
 - To evaluate the moderating role of consumer acceptance on attitude influencing purchase intention

2 Literature Review

The advent of technology has opened a plethora of research areas for organizations as well as researchers. Augmented Reality (AR) is one of the focal points for retailers as an interface that enriches brand engagement. AR dates back to the 1960s when 3D graphics were presented via a see-through HMD by Sutherland [10]. The term 'Artificial Reality' was propounded by Myron Krueger in 1970s. A concept Videoplace was used wherein silhouettes created by computer graphics surrounded the users [11]. As the 1990s witnessed extensive exchange of knowledge at conferences and international workshops the research implications for AR increased.

The pioneer work in establishing research for augmented reality was done by Azuma in 1997. [12] states that Augmented Reality is a technology that comprises of three core essential elements: combination of real and virtual content, real-time interaction, 3D incorporation. Therefore, a lateral definition of augmented reality could be information visualisation technology. Given a real-time environment setup, [13] describes augmented reality as a

blend of real and virtual objects to create three-dimensional real time synchronisation between the user and the platform provider.

As per the 'mixed reality continuum' ranging from real to virtual environment [14] AR is much closer to the real environment as compared to the augmented virtuality. AR is more of a facilitator to make the customers work on their perceptions in order to make better purchase decisions and VR focuses on the extensive usage of technology in order to captivate the user's attention by creating a fascinating environment, thereby, eliminating the relevance of real environment dynamics [15].

Despite this range of characterization for augmented reality, [12][14] categorization and resultant definition of augmented reality seem more credible. Azuma's [12] definition of augmented reality suggest that technology and support systems are pertinent for a seamless AR based customer experience. Furthermore, though AR is an embodied form of interactive technologies, researchers have identified few characteristics akin solely to AR. These are harmony [16]; vigour, location centrality [17]; virtuality and seamlessness [18].

2.1 Applications of Augmented Reality

In the initial phases of augmented reality research, applications were focussed on medicine, industry, and military but a gradual shift towards its commercialisation foraying into marketing, entertainment, tourism, journalism has been witnessed in the last couple of years [19]. Fighting virtual monsters [20]; showing medical data inside patient's body [21]; architects being able to develop unfinished building structure [22]; students viewing virtual molecules in real time [23] are some of the examples of prototypes developed by researchers in the early phases.

Majority AR researches revolve around user perception highlighting augmentation characteristics. 'Augmentation Quality' covers various aspects of customer satisfaction such as hedonic, pragmatic and aesthetic which effectively change user perceptions about product quality and increase their willingness to buy [24]. Further, 'augmentation quality' is highly dependent on factors such as type of product, virtual product representation, content quality, pictures and most importantly the integration of all these into real time environment setup [25]. Thus, the quality of augmentation tends to be evolving.

Another implication of reinforced user perception is that it facilitates adoption of new technologies. According to [26] AR incorporates human like traits that change user perception, enhances confidence and influences buying decisions. A few factors to consider are convenience of digital transaction, product usage concerns and psychological discomfort while imbibing them in augmented reality-based applications. Various theories on attitude and behaviour propound that consumer intention is an outcome of their attitude. The attitude behaviour consistency theory suggested by [27] highlights that a firsthand product experience increases the chances of buying as compared to indirect experiences. Since, AR offers telepresence, which is analogous to a direct product experience, therefore, it is reasonable to expect a high degree of attitude behaviour consistency [28].

In addition to characteristics relating to technology, other elements that are thought to affect purchase intentions include social influence, trust, and brand confidence [29]. As a result, consumers' cognitive reactions can be influenced by the improved experience of interactive picture technology, and consequently augmented reality, which can offer both high utilitarian and hedonic value [28][30]. However, trusting the applications' true size, visuals, colour accuracy, and alignment with reality is essential to establish an effective virtual product experience thereby influencing customer decision-making [30].

From a consumer's perspective, cosmetics are directly related to image and appearance. This study [31] directly indicates the importance of real time representation of beauty products in terms of colour display and graphics that can positively influence buying behaviour. Four key dimensions such as interactivity, vividness, augmentation, and aesthetics have an impact on the user perception [31]. Also, AR's playfulness leads to exploratory behaviour influencing their purchase intention [31].

The above studies particularly focus on AR characteristics and drivers for its usage indicating the resulting outcomes such as behaviour and attitude. Studies also suggest customer traits and usage experiences as a key

deciding factor in AR successful implementation. When it comes to experience customers are likely to emphasize on outcome rather than factors that influence the amount of effort required [16]. These customers have a high level of cognitive innovativeness. Customers with lower levels of cognitive innovativeness are more likely to use AR because they value ease of use over outcome. Therefore, the extent of customer's cognitive innovativeness i.e. the inclination towards engaging in newer experiences indicates the depth of customer involvement with AR based applications [16]. Thus, Aesthetics, service excellence, functionality influence the cognitive innovativeness leading to high levels of customer involvement.

A comparative analysis of product display via AR vs non-AR based product presentation suggested that enjoyment and perceived informativeness enhance the shopping experience, thereby leading to increased purchase intention [32]. Further, the study concluded that the consumer's willingness to share personal information also increases as perceived informativeness and enjoyment act as a catalyst in the whole buying experience [32]. Thus, as opposed to the concept of intrusiveness of AR, the outcome suggests more acceptance on the part of the consumers regarding AR and its functioning.

Very few researches have focussed on usage of AR peripherals as a means of communication between the user and the brand. The HoloLens augmented reality glasses were used to assist shoppers in supermarket. The results showed the superior communication levels lead to higher levels of user engagement. Therefore, for interactive technologies the interface and medium of engagement is imperative for ensuring change in attitude [33].

Study by [34] highlights various challenges for AR in Furniture retail in Sweden Furniture industry. Usually, any home furniture is bigger than usual in size making the customer sceptical about its fit as per their home structure. Hence, product display and pictures cannot be convincing enough to make a purchase decision [34]. Furthermore, higher levels of AR awareness indicated increased willingness of the customers to buy a particular product. Also, it had a positive impact on future adoption of AR applications for buying furniture [34]. Thus, adoption becomes a key factor in successful implementation of AR in retail.

[35] discuss about 2D vs AR as a means of data visualisation. The study [35] highlights various challenges posed by AR users. Whilst AR is highly engaging it poses challenges with respect to its inculcated features that are dependent on movement and gestures. Therefore, users may experience challenges regarding usability and interaction emphasising on the need for physical and digital alignment.

Deep involvement i.e. immersion and presence have an impact on customer satisfaction. According to [36] the presence and deep involvement of the customer influences their satisfaction levels. The novel AR experiences associated with enjoyment keep the customer's interest intact while ensuring high satisfaction. Further, product involvement encourages the customer to be tuned into the buying process creating more engagement, higher purchase intention and customer loyalty [37]. Despite the above benefits, authors associate contingency as a drawback for AR usage in environments where the usage changes and is not imbibed into AR features [36]. The previous studies highlight various benefits and features of AR in varied industries. Whilst AR seems to be highly promising there are challenges in implementation. Also, AR implementation is in trial phases across industries but furniture retail remains unexplored.

3 Research Method

This research follows a pragmatist philosophy. Pragmatists do not see the world as an absolute entity. The idea that objects under study are not governed by universal principles but studied in its current context renders flexibility to the final interpretations under the pragmatist ideology [38]. Therefore, research methodology for pragmatism usually incorporates mixed methods. Mixed methods researchers take into consideration various approaches and strategies for data collection and analysis rather than focussing on one specific method [39]. Thus, this study imbibes the characteristics of both exploratory and descriptive research designs. Whilst exploratory research intends to identify patterns from the previous researches, descriptive research explains the events as and when they take place [40].

For the purpose of this research, data was collected through structured undisguised questionnaire with likely customers of furniture retail giants such as IKEA, Pepperfry and Amazon. Non-probabilistic judgement sampling method for the purpose of data collection. Study covered respondents from twin cities of Hyderabad and Secunderabad. The initial respondent outreach target was 400. After scrutinising the responses, a total of 383 were considered for analysis in the study. This also aligns with [41] formula for identifying the sample representative of the population. Statistical Package for the Social Sciences (SPSS) was employed as a statistical tool for data interpretation and to gather the results. Descriptive statistics such as frequency, cross-tabulation was used to cover various aspects of the questionnaire relative to the research questions.

The study incorporated PLS path modelling for analysis and attaining the research objectives. Structural Equation Modelling (SEM), often known as causal modelling, is becoming the most popular technique for data analysis where many variables directly or indirectly impact the dependent variable [42]. PLS is deemed to be a more suitable statistical tool for non-normality and small sample size conditions demanded by LISREL i.e linear structural relation (covariance-based technique). Thus, PLS can model latent constructs even in non-normality and small sample sizes. Also, PLS model can be used to estimate the parameters of multi-dimensional constructs [43]. The success factors for PLS in marketing have been promising [44] making it suitable for analysis in this study.

3.1 Conceptual Framework

As this study aims to understand predictive behaviours wherein users may or may not have prior experience to such technology, therefore, in order to garner user's intention towards augmented reality applications, Unified Theory of Acceptance and Use of Technology (UTAUT) has been incorporated.

The UTAUT model is an extended variation of the Technology Acceptance Model (TAM) which was developed by Fred Davis in the year 1989 [45]. The UTAUT model [46] primarily focuses on four determinants: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC) to understand user's behavioural intentions towards usage of new technology. These are influenced by the moderating variables such as age, experience, voluntariness of use and gender which in turn have an influence on consumer behaviour and intention. In UTAUT, the performance expectancy is related to perceived usefulness and effort expectancy is closely related to perceived ease of use.

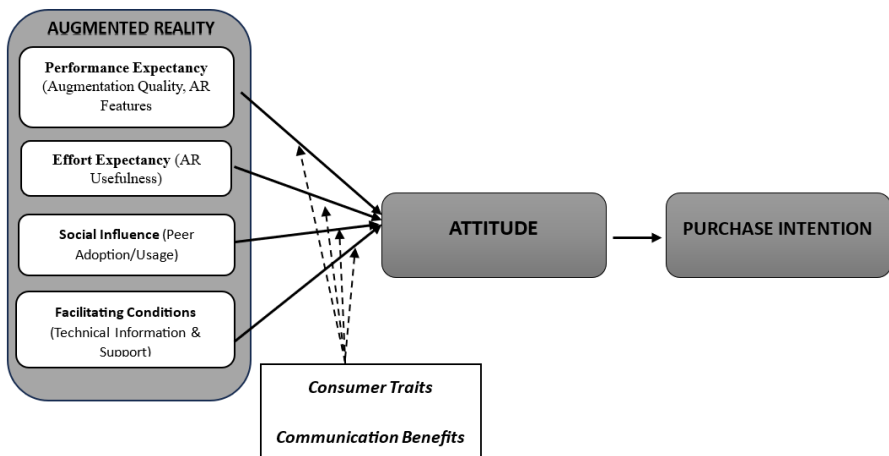


Fig. 1: Conceptual Framework

The dependent variable that acts upon AR simulation in this study would mainly be purchase intention. On deciphering type of product/product contextuality, virtual product representation, content quality, imagery [25] together imbibed into augmentation quality. Vividness, interactivity [47]; along with novelty [48] combined

together imbibed into augmented reality traits. Utility- ease of use, perceived usefulness [46] related to AR usefulness. Further, demographics; product usage concerns, confidence, psychological discomfort, digital transaction convenience, involvement imbibed into consumer traits [49]; communication benefits such as immersion and enjoyment [48] are a few moderating variables to consider.

The variables and their elaborated elements can be described as follows:

Variable	Dimension	Literature/Author
Var1a-Performance Expectancy: Augmentation Quality	Type of product/Product Contextuality; Virtual Product Representation; Content Quality; Imagery	(Venkatesh <i>et al.</i> , 2003); (Poushneh, 2018)
Var1b- Performance Expectancy: AR Features	Vividness, Interactivity; Novelty	(Venkatesh <i>et al.</i> , 2003); (Azuma <i>et al.</i> , 2001); (Yim <i>et al.</i> , 2017)
Var3- Effort Expectancy: AR Usefulness	Utility- ease of use, perceived usefulness	(Venkatesh <i>et al.</i> , 2003)
Var4- Social Factors	Peer adoption/usage of AR	(Venkatesh <i>et al.</i> , 2003)
Var5- Facilitating Conditions	Technical Information & Support	(Venkatesh <i>et al.</i> , 2003)
Moderating Variables		
Consumer Traits	Product Usage Concerns; Confidence; Psychological Discomfort; Digital Transaction Convenience; Involvement	(Boardman, Henninger and Zhu, 2020); (Van Esch <i>et al.</i> , 2019)
Communication Benefits	Immersion and Enjoyment	(Yim <i>et al.</i> , 2017)

4 Results and Discussion

4.1 Results

This study examines the interrelationship between augmented reality applications and consumer purchase intention for home décor and furnishings, taking attitude as a mediator. Several hypotheses have been tested each indicating a direct or indirect or no impact at all. Accordingly, the results have been discussed in this section. Cronbach Alpha depicts the reliability of the instrument and should be greater than 0.70 (Table 1).

Table 1. Internal Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ATTITUDE	0.828	0.897	0.882	0.552
Communication Benefits	0.937	0.953	0.95	0.76
Consumer Traits	0.842	0.888	0.885	0.572
Effort Expectancy	0.868	0.877	0.902	0.609
Facilitating Conditions	0.785	0.859	0.866	0.596
PURCHASE INTENTION	0.883	0.903	0.913	0.639
Performance Expectancy	0.898	0.903	0.92	0.623
Social Influence	0.902	0.904	0.927	0.718

The results exhibit strong convergent validity. rho_a and rho_c exceed the cut off value of 0.70 (Table 1) confirming high internal consistence and reliability. According to study [50] composite reliability provides better estimates for establishing convergent validity as compared to AVE which is a more conventional method. Therefore, reliability and validity deem fit for the model.

Table 2. Discriminant Validity

	ATTAR	CB	CT	EE	FC	PI	PE
Attitude (ATTAR)							
Augmented Reality (AR)	0.841						
Communication Benefits (CB)	0.647						
Consumer Traits (CT)	0.647	0.724					
Effort Expectancy (EE)	0.738	0.65	0.68				
Facilitating Conditions (FC)	0.709	0.746	0.826	0.79			
Purchase Intention (PI)	0.739	0.874	0.738	0.761	0.648		
Performance Expectancy (PE)	0.834	0.803	0.7	0.762	0.736	0.769	
Social Influence (SI)	0.583	0.588	0.512	0.59	0.453	0.743	0.642

Discriminant Validity is indicated through Heterotrait-Monotrait (HTMT) ratios which are below 0.9 for each construct in the correlation matrix (Table 2). The correlation coefficient between Effort Expectancy and Consumer Traits is 0.68 which is lower than the required limit for discriminant validity. The same stands for Augmented Reality and Communication Benefits with a correlation of 0.647 lesser than 0.9. Furthermore, the communication benefits and purchase intention have a correlation of 0.738 which suggests that each variable has significant relevance for the study.

Table 3. Measurement Model Assessment

	Factor Loadings	Cronbach's alpha	Composite reliability (rho_a)	Average Variance Extracted (AVE)
ATTAR1	0.816	0.89	0.916	0.645
ATTAR2	0.721			
ATTAR3	0.84			
ATTAR4	0.829			
ATTAR5	0.804			
ATTAR7	0.805			
CB1	0.874	0.937	0.95	0.76
CB2	0.909			
CB3	0.872			
CB4	0.807			
CB5	0.915			
CB6	0.849			
CT1	0.716	0.87	0.905	0.658
CT2	0.844			
CT3	0.875			
CT5	0.793			
CT6	0.82			
AR: Effort Expectancy	0.876	0.835	0.891	0.673
AR: Facilitating Conditions	0.782			
AR: Performance Expectancy	0.893			

AR: Social Influence	0.718			
PI1	0.851	0.883	0.913	0.639
PI2	0.704			
PI3	0.601			
PI4	0.852			
PI5	0.888			
PI6	0.859			

The range of factor loadings for Attitude Towards AR is 0.721 to 0.84. There is substantial correlation between the variables and underlying construct indicated by high factor loadings for augmented reality (AR). The communication benefits and observed variables exhibit a strong correlation backed by high factor loadings between 0.807 to 0.915. These provide an understanding of perceived benefits of communication with respect to augmented reality. The consumer traits exhibit factor loadings from 0.716 to 0.875 suggesting a strong correlation. These capture the customer characteristics that indicate high customer inclination towards usage of augmented reality. It can be concluded that AR has an impact on consumer attitude leading to purchase intention.

With an Acceptable Convergent Validity (AVE) value acceptance at 0.5 the value of attitude towards AR is 0.645 which explains an acceptable variance of 64.5% across the indicators. The variance stands at 67.3% and 76% for augmented reality and communication benefits respectively. For consumer traits the AVE is valued at 0.658 indicating a variance of 65.8% which is more than acceptable limit of 0.5. Purchase intention has an AVE value of 0.639 more than the satisfactory limit of 63.9% of variance among its indicators. In conclusion, consistently high AVE values and strong correlation among the latent constructs with the measured items indicate robust internal consistency and adequate convergent validity.

4.2 Discussion

As per the finding from the data analysis, all hypotheses under the study seem valid and reliable. The analysis is aligned with the primary objective of the study. Overall, it can be stated that attitude majorly impacts consumer decision making.

Table 4. Summary of Results- Path Coefficients-Direct Relationship

Predictor Variable	Path Relationship	Beta Value	Lower Control Variable (2.5%)	Upper Control Variable (97.5%)	P Value	Decision
Augmented Reality	Augmented Reality > ATTITUDE	0.7	0.549	0.827	0	Supported
Consumer Trait	Consumer Traits > ATTITUDE	0.029	-0.075	0.166	0.635	Not Supported
Communication Benefits	Communication Benefits > ATTITUDE	0.054	-0.112	0.201	0.491	Not Supported
Attitude Towards AR	ATTITUDE > PURCHASE INTENTION	0.637	0.558	0.715	0	Supported

H1: There is a significant relationship between Augmented Reality (AR) applications and consumers' attitude towards the usage of AR for buying furniture and home décor.

The findings indicate a positive relationship between AR and attitude. The beta coefficient value falls between 0.549 and 0.827 exhibiting a 95% confidence interval which depicts high statistical significance between AR applications and consumer attitude. This is further strengthened by a p-value of zero which is less than 0.05. This is supported by findings in literature [27] [28] [51] that AR has an impact on consumer attitude leading to higher acceptance and increased purchase intention.

H2: There is a significant relationship between consumer traits and consumers' attitude towards the usage of Augmented Reality (AR) for buying furniture and home décor.

The analysis indicates weak relationship. The relationship is statistically insignificant with beta at 0.029 and high p-value of 0.635. Hence, the hypothesis is rejected. Also, literature states that the customer adoption and acceptance of technology need not necessarily influence their intention to purchase [30]. This is applicable to home décor and furniture as well. Also, as AR is less explored in-home décor and furnishings as compared to other areas such as fashion could be one of the reasons for lesser correlation between acceptance and attitude.

H3: There is a significant relationship between communication benefits and consumers' attitudes towards the usage of Augmented Reality (AR) for buying furniture and home décor.

The results (Beta value= 0.054; p-value= 0.491) indicate that the relationship is not statistically significant. The communication benefits do not bring any change in consumer attitude. This implies that app interface has no impact on attitude which further influences purchase intention. The amount of control a user has while interacting with the app does not influence their buying decision. The findings completely conflict with the literature [48] that suggests the impact of app interface on user experience leading to a change in their attitude.

H4: There is a relationship between consumers' attitudes towards the usage of Augmented Reality (AR) for buying furniture and home décor and their purchase intention.

The findings indicate a positive relationship between attitude and purchase intention. Beta value stands at 0.637 and p-value of zero lower than the standard level of significance i.e. 0.05. This is strong evidence to conclude that augmented reality applications have a strong impact on consumer attitude which can further influence purchase intention. Certain studies covered in literature also support the same [52].

Table 5. Summary of Results- Path Coefficients-Indirect Relationship

	Beta Value	Lower Control Variable (2.5%)	Upper Control Variable (97.5%)	P values
Augmented Reality > Attitude Towards AR > Purchase Intention	0.446	0.341	0.555	0
Communication Benefits > Attitude Towards AR > Purchase Intention	0.034	-0.07	0.135	0.5
Consumer Traits > Attitude Towards AR > Purchase Intention	0.019	-0.049	0.104	0.634
Consumer Traits x Augmented Reality > Attitude Towards AR > Purchase Intention	0.095	0.025	0.181	0.016
Communication Benefits x Augmented Reality > Attitude Towards AR > Purchase Intention	-0.08	-0.171	-0.012	0.048

H5: Attitude has a mediating impact towards the usage of Augmented Reality (AR) on the relationship between Augmented Reality (AR) applications and purchase intention.

The findings indicate strong association between augmented reality applications and purchase intention. With beta coefficient falling between 0.341 and 0.555, the p-value at 0, a statistical significance of 95% confidence interval suggests that user perception is strongly influenced by usefulness of technology for buying home décor and furniture. It can be concluded that favourable attitude towards usage of AR leads to higher levels of purchase intention. Therefore, attitude influences purchase intention.

H6: Attitude has a mediating impact towards usage of Augmented Reality (AR) on the relationship between communication benefits and purchase intention.

The hypothesis explains the mediating role of communication benefits on consumer adoption of technology. The findings reveal that app interface does not influence consumer attitude towards AR applications rendering it statistically insignificant. The results show a weak association between the consumer attitude and app interface

(beta=0.034, p-value=0.5) which are higher than acceptable significance limits. Therefore, there is no statistically significant correlation between communication benefits, attitude and purchase intention. Hence, app interface does not influence attitude which may lead to purchase intention.

H7: Attitude has a significant mediating impact on relationship between consumer traits and purchase intention towards usage of Augmented Reality (AR).

Beta coefficient at 0.019 indicates that relationship between customer attributes and purchase intention is statistically insignificant. This indicates that customers are well versed with new technologies and their acceptance levels are generally higher for such new age technologies. Therefore, consumer traits may not have significant impact on how people feel about AR technology for buying home décor and furniture.

5 Implications and Future Research

AR applications in the home décor and furnishings are in their nascent stages. Since, AR provides more engagement while promising higher levels of accessibility, the AR pathway needs to be continuously evolving. Retailers will have to focus on a user-friendly dynamic interface to ensure real time product experience that builds a fruitful AR based customer journey. Thus, future research would be more focussed on empirical methods, experiment-based studies that suggest ideas of making AR more humanistic in approach.

6 Conclusion

Augmented Reality works as an effective use case for the furniture retailing industry. The findings of the study suggest that Augmented Reality has the capacity to change consumer attitude to a great extent. Hence, the core areas of business such as product designing, HR training, SCM systems along with the competitive landscape would be witnessing a paradigm shift in the coming years.

As a product furniture has innate complexities that require effort from the user for productively visualising and appropriately placing the furniture or home décor item in their own surroundings. The primary challenges would be real time near accurate analysis regarding actual fit, dimensions for certain types of structures. Therefore, the alignment of furniture with the core structure becomes an underlying challenge. In order to enhance customer accessibility, furniture retailers need to thoroughly plan image design in terms of colour palette, photoshop as well as mood boards. The amalgamation of different elements can greatly influence the consumer purchase intention.

As AR becomes more recognized and established, exciting opportunities will emerge for retailers to engage audiences in various immersive ways. The future retail may witness inculcation of tech giants with retailing via mergers and acquisitions in order to create more agile systems to keep up with the changing consumer dynamics. The consumer market can witness extensive usage of Augmented Reality, Artificial Intelligence to enhance and enrich the customer experience throughout the customer's purchase journey.

Disclosure of Interests. The authors do not have any competing interests to declare that are relevant to the content of this article.

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