

## **The Impact of Augmented Reality on Consumer Purchase Behaviour: A Descriptive Analysis**

**Harish Kumar**

Asst. Professor, School of Management, Graphic Era Hill University,  
Dehradun Uttarakhand India

### **Abstract**

Augmented reality (AR) has changed how consumers engage with companies and products, influencing their purchases. AR engages users by seamlessly merging digital information into the real world. Augmented reality's try-before-you-buy feature influences consumer buying. Consumers made decisions using product information, photos, and reviews. AR lets them try things in their own environment in real time. AR apps allow users to visualize furnishings in their houses or try on virtual items before buying. This engaging, personalized experience boosts confidence and decreases the danger of making the wrong option, increasing conversion rates. AR boosts brand loyalty and consumer engagement. Brands may impress customers through interactive and enjoyable experiences. AR games, filters, and virtual try-ons engage customers emotionally. Emotional attachment fosters client loyalty and repeat purchases. Augmented reality adds exclusivity and uniqueness. AR-enabled marketing campaigns and product debuts stand out and generate conversation. Innovative brands engage consumers, increasing brand awareness and buying behaviour.

**Keywords:** *Augmented Reality, Immersive Experience, Personalized Experience, Brand Loyalty, Emotional Connection*

### **Introduction**

AR has transformed customer purchase behavior. AR creates an immersive experience that has changed how people interact with companies and products. Augmented reality allows consumers to "try before buying." Consumers formerly relied entirely on product descriptions, photos, and reviews to make judgements. AR allows customers to virtually try things in their own environment. This interactive and personalized experience boosts confidence and minimizes the risk of making a bad purchase. AR apps allow users to visualize furnishings in their houses or try on virtual items before buying. This virtual trial improves their decision-making and enhances their likelihood of buying.

In addition to the ability to try products virtually, augmented reality boosts consumer engagement and brand loyalty by allowing virtual product testing. AR lets marketers leave lasting impressions by creating interactive and interesting experiences. AR games, filters, and virtual try-ons engage customers emotionally. Emotional attachment drives client loyalty and repeat purchases. Augmented reality is ideal for creating unique, cutting-edge brand experiences that captivate consumers. Brands may stand out and build excitement by using AR in their marketing efforts and product launches. AR experiences improve brand awareness and buying behaviour due to their exclusivity and novelty. Augmented reality has also made shopping fun and engaging. It adds exclusivity to shopping. Brands can give customers a better purchasing experience by using AR. AR advertising and product launches make consumers feel inventive and cutting-edge. This perception attracts them and strengthens brand-consumer relationships. AR-enabled brands are more likely to gain customer loyalty, which boosts conversion rates and business growth.

### **Literature Review**

Research indicated that before making a purchase, AR can increase the range of products that customers are considering, reduce the range of options, lower brand value, assist in product curation, increase hedonic value, and affect consumer confidence in their decision. In terms of weighing the possible benefits and risks of using AR as an innovation technology, these findings have consequences for theory as well as managerial decisions. (Romano et. al., 2020). Another experiment with consumers examined

the outcomes of using augmented reality when buying clothing online. The findings demonstrated that only attitude, which was directly influenced by the stimulus, telepresence, and product knowledge, predicted purchase intent. This implies that augmented reality may be able to influence purchase intent positively if it can influence attitude. (Schwartz, 2011).

Research demonstrated that augmented reality interactions had a beneficial influence on consumer perception and behavioural intentions, with young consumers—young millennials and first-generation Z—having the most potential. A strategic use of augmented reality as a communication tool for fast-moving consumer goods companies in Vietnam was also demonstrated by the study. (Minh, 2020). Another article examines whether augmented reality shopping apps affect millennials' propensity to make purchases. With the aid of snowball sampling and the purposive sample technique, 384 Indian respondents were chosen. The respondents' replies were elicited using a standardized questionnaire. Results revealed that purchase intention was considerably influenced by the marketing's augmented reality's credibility. In general, augmented reality has an impact on consumers' intents to make purchases. (Khan & M, 2019).

A paper examined how consumers' pleasure, contentment, intention to return, and intention to purchase were affected by the experience realms (entertainment, educational, escapist, and aesthetic) of augmented fashion reality applications. The findings indicated that customers' pleasure, happiness, desire to reuse, and intention to purchase were positively influenced by entertainment and aesthetic experience. The effects of the experience worlds of augmented fashion reality applications on pleasure, contentment, reuse intention, and buy intention varied significantly depending on gender. In conclusion, the experience domains have an impact on the enjoyment and satisfaction that influence the desire to reuse and purchase. (So, & Kim, 2013). Another article underscores that augmented reality technology has been created and used in a wide range of Egyptian sectors, and that the text's target audience is composed of highly educated university students from social classes A and B who have high and higher middle-class salaries. There were 152 participants in the overall sample of validly analysis online surveys, mostly university students of both sexes from private universities in Cairo. It is advised to use augmented reality technologies in Egypt's shopping sector to enhance customer engagement and sales in light of the findings that show a good association between this technology and consumer interactions there. (Belal, 2021).

Research intends to examine views towards both conventional electronic online purchasing and augmented reality-based electronic commerce. According to the findings, augmented reality greatly increases internet shoppers' buying intentions. Personality factors, such as neuroticism and openness to new experiences, are connected to online purchasing behaviours and predict impulsive purchasing. Other factors like self-efficacy, anxiety towards technology, or perceived hazards related to online shopping should be included in future study. (Lixandriou et. al., 2021). Another article examines the impact of augmented reality technology on customer behaviour in online shopping environments. A smart mirror for virtual glasses was tested using a new conceptual model that was created based on the technology acceptance model (TAM). Results from these two marketplaces show similarities as well as differences in how consumers are motivated to use augmented reality systems to support their online buying decisions. Retailers should be able to manage their web channels more effectively thanks to these insights, which might also be applied to mobile channels (Pantano et. al., 2017).

A paper examined the possible effects that games using augmented reality technology may have on related industries. Online reviews are used as a stand-in for consumer engagement and perception to analyze how Pokemon Go has affected nearby establishments. The findings demonstrate that restaurants connected to Pokemon Go do indeed experience better levels of consumer engagement and more favorable consumer impression, but these impacts are greatly attenuated by the characteristics of a restaurant. For business owners and politicians, this research offers insights into the potential benefit of such connections (Pamuru et. al., 2018). Another research looks at augmented reality applications in the travel industry. It looks at the evolution of augmented reality throughout its history, as well as its various applications and subtypes. It has been shown that augmented reality applications offer tremendous marketing convenience to establishments and travel places, enhancing consumer confidence while

facilitating travel. Businesses who want to capitalize on market growth in the years to come and seek to get a competitive edge by influencing tourists heavily will adopt augmented reality applications. (Özkul & Kumlu, 2019).

Research attempts to determine whether businesses in the United Arab Emirates ought to use augmented reality technology and include it into their marketing plans. To better comprehend customer preferences and attitudes regarding augmented reality, primary research was carried out locally in the UAE. The findings indicated that customers favour augmented reality marketing favourably. There were suggestions and guidelines for additional research. (Alotaibi, 2021). In another research, the effects of a physical store, a non-immersive virtual store, and an immersive virtual store setting are compared in terms of how they affect consumers' attitudes towards and purchasing patterns for fruits and vegetables (FaVs). The study objectives were addressed using an after-only questionnaire survey and an experimental between-subjects design (i.e., three groups). According to the study, consumers see FaVs similarly in immersive and non-immersive virtual stores (VS), but they purchase more FaVs in VS than they would in a real store. The results also show that consumers tend to rely less on intrinsic cues (i.e., the appearance of FaVs) they employ in the physical shop and more on extrinsic signals (i.e., prices) when evaluating FaVs on offer in the immersive VS. regarding the value of virtual reality for a deeper knowledge of consumer behaviour, the findings have significant ramifications for practitioners and researchers. (Lombart et. al., 2020).

**Objective of the Study**

To Analyzethe Impact of Augmented Reality on Consumer Purchase Behaviour

**Methodology**

This study utilized a structured questionnaire as a survey tool to collect data from 241 participants. Various statistical techniques, including mean calculation and t-test, were employed to analyze the gathered data. Convenience sampling was adopted as the sampling technique, wherein participants were selected based on their ease of access and voluntary participation.

**Table 1 The Impact of Augmented Reality on Consumer Purchase Behaviour**

Serial No.	Statement of Survey	Mean Value	t-value	p-value
1	Augmented reality allows consumers to visualize products in their real environment, bridging the gap between online and offline shopping.	3.73	2.973	0.002
2	By overlaying digital information or virtual objects onto the physical world, AR creates a unique and captivating experience for consumers.	4.48	11.907	0.000
3	AR enables personalized shopping experiences by tailoring product recommendations and customization options based on individual preferences.	3.60	1.194	0.117
4	By experiencing the product virtually, consumers can make more informed decisions and reduce the likelihood of returning items, saving time and resources for both consumers and retailers.	4.08	5.836	0.000
5	Augmented reality provides consumers with a greater sense of confidence in their purchase decisions.	4.10	6.318	0.000
6	AR overlays digital information onto physical products, providing consumers with real-time access to detailed product specifications, reviews, ratings, and	3.74	2.872	0.002

	additional information.			
7	The social sharing aspect of AR significantly impacts consumer purchase behavior, driving both awareness and desire for the featured products.	4.20	8.634	0.000
8	By fostering a sense of enjoyment and offering rewards, AR influences consumer purchase behavior by increasing brand loyalty and driving repeat purchases.	3.83	4.534	0.000
9	AR technology is still relatively new, and its novelty factor appeals to early adopters and tech-savvy consumers.	4.22	9.369	0.000
10	Augmented reality experiences have the potential to create emotional connections with consumers and differentiate brands from competitors.	3.77	3.595	0.000

Table 1 presents the mean values for different statements in a study on “impact of augmented reality on consumer purchase behaviour”. The statement with the highest mean score, 4.48, suggests that “By overlaying digital information or virtual objects onto the physical world, AR creates a unique and captivating experience for consumers”. The next statement, scoring 4.22, indicates that “AR technology is still relatively new, and its novelty factor appeals to early adopters and tech-savvy consumers”. Furthermore, a mean value of 4.20 suggests that “The social sharing aspect of AR significantly impacts consumer purchase behavior, driving both awareness and desire for the featured products”. The statement “Augmented reality provides consumers with a greater sense of confidence in their purchase decisions” obtained a mean score of 4.10, while the statement “By experiencing the product virtually, consumers can make more informed decisions and reduce the likelihood of returning items, saving time and resources for both consumers and retailers” had a mean value of 4.08. On the other hand, the mean value of 3.83 suggests that “By fostering a sense of enjoyment and offering rewards, AR influences consumer purchase behavior by increasing brand loyalty and driving repeat purchases”. The statement “Augmented reality experiences have the potential to create emotional connections with consumers and differentiate brands from competitors” obtained a mean score of 3.77. Furthermore, the mean value of 3.73 indicates that “Augmented reality allows consumers to visualize products in their real environment, bridging the gap between online and offline shopping”. In contrast, the last two statements, with mean values of 3.74 and 3.60, fall within the lowest category. These statements highlight that “AR overlays digital information onto physical products, providing consumers with real-time access to detailed product specifications, reviews, ratings, and additional information” and “AR enables personalized shopping experiences by tailoring product recommendations and customization options based on individual preferences”. The t-values for each statement in the investigation of the impact of augmented reality on consumer purchase behaviour were positive and statistically significant ( $p < 0.05$ ), indicating a significant relationship between the variables.

### Conclusion

In conclusion, augmented reality has brought about a significant transformation in consumer purchase behavior. By enabling virtual product experiences, enhancing engagement, fostering emotional connections, and creating a sense of exclusivity, AR has revolutionized the way consumers interact with products and brands. The ability to try products virtually before making a purchase has provided consumers with a personalized and risk-free shopping experience. Additionally, the interactive and entertaining nature of AR experiences has fostered brand loyalty and increased consumer engagement. Furthermore, the novelty and exclusivity associated with augmented reality have made shopping more exciting and memorable. As AR continues to evolve, it will undoubtedly have a profound impact on consumer behavior, ultimately shaping the future of retail.

## References

- Alotaibi, I. (2021, April). An Exploratory Study of Augmented Reality Marketing in UAE. In 2021 1st International Conference on Artificial Intelligence and Data Analytics (CAIDA) (pp. 271-272). IEEE.
- Belal, S. A. (2021). Impact of Augmented Reality Technology on Customer Engagement in Egypt. *International Journal of Tourism, Archaeology and Hospitality*, 1(1), 60-88.
- Khan, H., & M, D. (2019). Role of Augmented Reality in Influencing Purchase Intention Among Millennials. *MKTG: Internet Marketing & E-Commerce (Topic)*.
- Lixăndroi, R., Cazan, A. M., & Maican, C. I. (2021). An analysis of the impact of personality traits towards augmented reality in online shopping. *Symmetry*, 13(3), 416.
- Lombart, C., Millan, E., Normand, J. M., Verhulst, A., Labbé-Pinlon, B., & Moreau, G. (2020). Effects of physical, non-immersive virtual, and immersive virtual store environments on consumers' perceptions and purchase behavior. *Computers in Human Behavior*, 110, 106374.
- Minh, D. T., Long, H. C., & Vy, T. T. (2020). The Integrations with Augmented Reality Advertisements from the Perspectives of Vietnamese Consumers. *Journal of Hunan University Natural Sciences*, 47(9).
- ÖZKUL, E., & KUMLU, S. T. (2019). Augmented reality applications in tourism. *International Journal of Contemporary Tourism Research*, 3(2), 107-122.
- Pamuru, V., Khern-am-nuai, W., & Kannan, K. (2021). The impact of an augmented-reality game on local businesses: A study of Pokémon Go on restaurants. *Information Systems Research*, 32(3), 950-966.
- Pantano, E., Rese, A., & Baier, D. (2017). Enhancing the online decision-making process by using augmented reality: A two country comparison of youth markets. *Journal of Retailing and Consumer Services*, 38, 81-95.
- Romano, B., Sands, S., & Pallant, J. I. (2021). Augmented reality and the customer journey: an exploratory study. *Australasian Marketing Journal*, 29(4), 354-363.
- Schwartz, A. M. (2011). Augmenting purchase intent: an empirical study on the effects of utilizing augmented reality in online shopping. University of California, Riverside.
- So, J. I., & Kim, S. H. (2013). The effects of augmented reality fashion application on pleasure, satisfaction and behavioral intention. *The Research Journal of the Costume Culture*, 21(6), 810-826.