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Augmented Reality Experience Modeling in B2C E-Commerce: Buyer Behaviour Perspective

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Abstract: The up surging role of artificial intelligence (AI)towards orchestrated marketing approach assist resonating target customers from different touch points. Technologies such as augmented reality (AR) and virtual reality(VR) play a crucial role by inducing a nexus of sensory stimuli in enhancing buyers' experiential value and determining their purchase behaviour. Through physical mapping, AR applications recognize and track physical space and objects followed by the placement of virtual objects in the real world. Thus, AR leverage machine learning to enable human-AI interaction. In this line, the present study intended to develop an AR experience model to determine buyers' behaviour in B2C e-commerce. Partial Least Square based Structural Equation Modeling was incorporated to witness the significance of the hypothesized relationships between the variables; while, bootstrapping technique was utilized to analyze the higher order effects in the proposed model. Findings revealed that the AR-induced perceived augmentation in e-retail enhances the experiential value of customers which positively lead to user engagement and purchase intentions. Further, the study witnessed the role of spatial presence as a mediating variable in perceived augmentation and experiential value relationship. The proposed model is unique to accompany the behavioural consequences predicted by the experiential value gained by the customers during human-AI inter action via AR application in B2C e-commerce. The study may assist marketers to augment their AR-based applications and sensory marketing stimuli in line with customers' expectations; thus, enriching their experiential value, engagement and purchase intentions in online retail.

Key words: Augmented Reality; Experiential Value; Spatial Presence; Engagement; Purchase Intention

1. Introduction

In the contemporary business environment, augmented reality (AR)and virtual reality (VR) are revolutionary forces that are changing how customers interact via AI-based interface and make purchase decisions, especially in the context of B2C e-

commerce.Since its inception, when internet buying was mostly defined by mere product line displays and static graphics, the customer interface part of e-commerce platforms has witnessed substantial change. In this line, the industry has rapidly embraced AR and VR technologies to enhance customer experience and improve operational efficiency(Celestin et al 2024). As perCMI Report (2024), "the global augmented reality in retail market was valued at USD 4.2 Billion in 2024 and is expected to reach USD 62.3 Billion by 2033, at a CAGR of 41.7% during the forecast period 2024 – 2033".The AR technology has been witnessed to help e-retailers in addressinga variety of challenges, such asthe customers' need for personalization and the growing demand for online shopping experiences that mimic physical retail stores; for instance, AR applications allow customers to visualize products in real-time in their own environment, eliminating uncertainties related to product peculiarities. AR uses gadgets like smart phones, tablets, or AR glasses to superimpose digital features onto the real world. This implies that users can engage with real-time virtual items and information that are projected on their physical surroundings. In this line, previous studies examined the effect of augmentationin terms of selected variables such as perceived usefulness or perceived ease of use (Chandra & Kumar 2018; Yim et al, 2017); however, the augmentation perceived by customers (through AR technology) may consists of other perceived benefits, which can't be explained by selected variables; thus,a comprehensive measurement of perceived augmentation would better explain the behavioural model, considering the subjective nature of the phenomenon (Chen & Lin 2022). Majority of researchers in the domain demonstrated the effect of AR on customer behaviour, they often skipped dealing with the phycological intervening variables responsible for it (Leue et al 2014); Further, the classical texts witnessed the application of AR in terms of purchase utility; while, the simultaneous effect of augmentation in terms of engagement is yet to be realized (Kazmi et al 2021). In this line, the present study developed an Augmented Reality Experience Model while accompanying the comprehensive effect of AR technology in terms of perceived augmentation. In this regard, it dealt with explaining the role of spatial presence in generating experimental value for customers as an effect of AR interface in B2C e-commerce platform. Witnessing the need of the marketers in terms of generating lead by orchestrating AR in online retail, the developed model further demonstrated the effect of augmentation in terms of user engagement and purchase intention in the light of experiential value perceived by the customers.

2. Review of Literature

By allowing customers to interact with products virtually in physical environment, AR creates a more engaging and personalized shopping experience. AR provides customers with a realistic view of how products will look or fit in their space, bridging the gap between physical and online shopping experiences to enhanced visualization

(Ebrahimabad et al 2024); thus, affecting customers' experience and buying intentions(Thakkar et al 2023).

2.1 Augmented Reality (AR)

Augmented Reality (AR) has emerged as a promising technology for enhancing e-commerce experiences. "Augmented reality (AR) technology relies on cameras to capture the real world,superimposes digital technology on the physical environment, and enhances user's perception of the natural world"(Juan & DeWitt, 2024, p.1). AI algorithms enable AR devices to map and understand the physical space around them and empower AR devices to recognize and track objects (Devagiri et al, 2022); which is crucial for accurate placement of virtual objects in the real world.

2.2 Role of AR in B2C E-commerce

Augmented reality (AR) has emerged as a valuable tool in B2C e-commerce. AR apps in e-commerce can help customers visualize products and potentially increase customers' experiential value and purchase intentions (Diana et al., 2023).By understanding how users interact with AR content, such apps can adapt and personalize experiences in e-commerce.In the context of B2C e-commerce, IKEA- the seventh most valuable furniture brand retailer has potentially leveraged AR technology (Statista Report, 2023-24). For instance, IKEA's Place app, launched in 2017, allows customers to visualize furniture in their homes using AR technology (Ozturkcan, 2020). Studies have shown that AR technology in e-commerce can increase consumer confidence and convenience in purchasing (Alves & Reis, 2020). In this line, Addin et al., (2024) stated that, IKEA's implementation of AR has led to increased customer engagement, stronger purchase intentions, and reduced product returns.

2.3 Theoretical Evidences: Buyer Behaviour Perspective

Witnessing the impact of augmented reality technology on buyer behaviour in e-commerce, the present study relied on Daft & Lengel's (1986) media richness theory which established that, "consumers tend to rely more on stimulus-based information when media richness is high) (p.23); based on which, Maity et al (2018, p.1) observed that, "consumers make decisions based on information gathered from sources that vary in the richness of the medium". In the context of augmented reality which is a rising form of interactive narrative, Yoo (2023, p.18) confirmed that, "narrative experience induces a higher experiential value than other simulative experiences, including presence and media richness".The concept of 'value'had realized its significance in explaining consumer behaviour in the late 1990s with Holbrook's(1994) value theory, in which 'value' was defined as "an interactive, relativistic preference experience, characterizing a subject's experience of interacting with a product or a service" (p.2). Gaining insights from Holbrook's theory, Mathwick et at (2001) conceptualized 'experiential value' which ensured its applicability in predicting buyers' behavioural outcomes (Tang & Chiang, 2010; Yuan & Wu, 2008;

Varshneya & Das 2017). Recently, the experiential value theory has recognized its relevance in human-AI interaction domain in predicting buyers' behaviour (Wang et al 2024).Javornik (2016) observed that AR virtual mirrors deliver a more realistic and interactive experience to customers. To establish the relational consequences in terms of behavioural outcomes in the context, the present study utilized Fishbein and Ajzen 's (1975) theory of reasoned action which suggests that "a person's behaviour is determined by their intention to perform the behaviour and that this intention is, in turn, a function of their attitude toward the behaviour and subjective norms (p.12). In human-AI interaction domain, Kwon et al (2020) validated its application by stating that, intention or behaviour is a function of a customer's attitude towards a technology which exhibit rich characteristics, especially in case of AI-based technologies such as augmented reality and virtual reality.

2.4 Perceived Augmentation

In the context of e-retaining, Javornik (2016) introduced perceived augmentation as "a salient media characteristic of AR applications recognized by AR app users" (p.1). Observing the significance of AR in B2C e-commerce, Ivanov et al (2023)conceptualized 'perceived augmentation' as "the extent to which users can have integrative and realistic experiences through interacting with a virtual environment that is close to the physical one" (p.4).

2.5 Spatial Presence

Spatial Presence refers to "the sense of being physically present in a virtual or augmented reality environment" (Caroux 2023, p.1).Spatial presence is formed through unconscious efforts to register oneself in a virtual environment, driven by perceptual, bottom-up processes that resolve mismatches between physical and virtual spatial cues (Lee et al., 2004).In such psychological state, virtual objects are experienced as actual objects in either sensory or non-sensory ways (Lombard & Jones 2025).

2.6 Experiential Value

Consumer-perceived value in AR interactions is characterized by experiential value, underpinned by hedonic, utilitarian or co-creation values (Bartosik-Purgat& Ratajczak-Mrozek, 2021). According to Manschot&Sleeswijk (2011, p.2),experiential value represents "the worth of the service, as it is perceived by thecustomer and formed through the experiences, dialogues and relations of the people who interact with the organisation's product or service".

2.7 User Engagement

Recent research highlights the importance of augmented reality (AR) in enhancing user engagement andexperience. Di Gangi & Wasko (2016, p.4) defined user engagement as "a user's state of mind that warrants heightened involvement and results in a personally meaningful benefit".In B2C ecommerce, "AR applications, such as virtual try-ons and interactive product displays, significantly enhance customer engagement by providing novel and enriched shopping experiences" (Enyejo et al, 2024, p.1).

2.8 Purchase Intention

Research studies indicated the relevanceof AR technology in inducing customers' purchase intention in e-commerce. Gupta et al (2014, p.1) defined purchase intention as "a textual expression showing adesire to purchase a product or a service in future". In the context of AR, Javornik (2016) highlighted perceived augmentation, interactivity, and flow as critical mechanisms impacting purchase intentions.Yim et al.(2017) noted that by generating higher degrees of novelty, immersionand utility, AR provides enhanced communicational experiences leading to positive opinions and purchase intentions towards specific product.

3. Hypotheses Development and Conceptual Framework

3.1 Perceived Augmentation and Experiential Value

In the context of Augmented Reality, Wu et al (2024) stated that, perceived augmentation positively influences consumers'experiential value, mediated by wow-effect and immersion.In this line,Çadırcı& Köse (2016) specified that, e-retailing is proposed to enhance experiential value, orchestrating hedonic and utilitarian perspectives; while addressing online shopping risks.Marín-Lora et al., (2022) noted thatthe physical presence of users in AR experiences can positively influence their perception and evaluation of products, enhancing their experiential value, purchase decision comfort, and overall product opinion.

3.2 Perceived Augmentation, Spatial Presence and Experiential Value

Augmented reality enhances online service experiences by providing simulated physical control and environmental embedding, leading to increased customer value perceptions and decision comfort (Hilken et al., 2017); thus, creating spatial presence, which provide experiential value and positively influences purchase intentions for virtual products in one's surroundings (Smink et al., 2020).Lee et al (2004) stated that, AR based perceptual cues are sufficient for creating spatial presence in online retail. In this regard, Javornik (2016) agreed that, perceived augmentation is crucial for understanding consumer reactions to AR features in terms of experiential valuegained through virtual flow based mediating effects. Fig.1 represents the conceptual framework of the study.

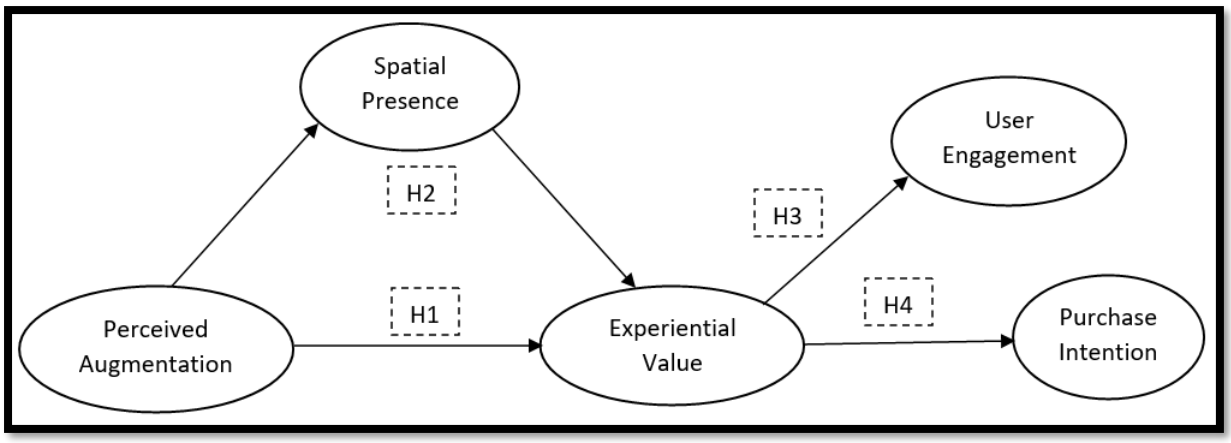

Fig. 1: Conceptual Framework
Source: Author

3.3 Experiential Value and User Engagement

Perceived augmentation, interactivity, and vividness of AR applications significantly generate experiential value among customers leading to leading to favourable attitudes user engagement and behavioural intentions (Ganesan & Kumar, 2024). AR delivers a multi-sensory and immersive encounter that allows users to visually explore the distinctive experiential value followed by high engagement (Enjeyo et al 2024). In the context of B2C e-commerce, Mohammad Saleem et al. (2022) observed that, stimuli comprehending informativeness, entertainment, and credibility of AR-based applications significantly contribute to enhanced experiential value and user engagement towards specific product.

3.4 Experiential Value and Purchase Intention

AR-characteristicsbased augmentation significantly influence utilitarian as well as hedonic experiential value, ultimately affecting purchase intention (Leonnard et al., 2019).According to Flavián et al (2017) AR apps presentvarious forms of vivid data (such as audio-visual content, images, and vibrant patterns) which enhance both the experiential and practical aspects of the purchasing process. Swan et al (2025) noted that, customers may explore things in a more immersive and captivating way with AR, which improves the online purchasing experience and intentions.As per Saleem et al (2022), AR-based shopping experience are considered valuable by customers, positively affecting their purchase intentions.

4. Research Methodology

The present study is exploratory cum descriptive in nature. It remains exploratory till the exploration of variables from the literature; while it becomes descriptive on account of statistical interpretation of the characteristics of the variables and their relational significance.

4.1 Target Population and Sampling Technique

The target population of the study comprised of individuals who have utilized IKEA application for shopping of home furniture and belong to the age group of 28 to 59 years. Thus, the study catered both generation X as well as Y. The study targeted IKEA app users as, the IKEA Augmented Reality (AR) app, known as IKEA Place, helps users visualize how furniture and home products would look and fit in their actual living spaces before making a purchase. It uses augmented reality technology to overlay digital 3D models of furniture onto real-world environments through a smartphone or tablet screen. IKEA Place uses ARKit (Apple) and ARCore (Google) — AR platforms for iOS and Android. The sampling unit of the study comprised of individual shoppers of home furniture through IKEA app particularly fromPAN India. The sampling technique is purposive sampling catering specific group of population who have experienced augmented reality. The questionnaire was distributed to 438 users of IKEA app; however, 407 responses were obtained. Subsequent to data cleaning and pre-processing, 394 responses were retained for statistical analysis. The sample size of 394 was found sufficient, asin case of 95% confidence level and a ±5% margin of error, the required sample size for a large population is approximately 384(Krejcie& Morgan, 1970). Amongst the respondents, 58% were male and 42% were female. Further, 66% of respondents belonged to X generation while 34% belonged to Y generation.The study comprised of both primary & secondary data. Primary data was collected to gain empirical evidences; while, secondary data was used for in-depth review of literature. The data was collected utilizing theMturkplatform, as it is considered reliable (Cao et al 2022)and has been used extensively in marketing researches.

4.2 Measurement Instrument

The survey instrument constituted a structured questionnaire based on 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).The study consists of five constructs viz. 'Perceived Augmentation', 'Spatial Presence', 'Experiential Value', 'User Engagement' and 'Purchase Intention'. The measurement scale of the respective constructs was adapted from various sources after a comprehensive review of literature. As such, the scale of the construct 'Perceived Augmentation' consists of four variables(Yim & Park 2020; Huang& Liu 2022);'Spatial Presence' consists of three variables(Kim & Lee 2020);'Experiential Value' consists of three variables (Huang & Liu 2022); 'User Engagement' consists of three variables (Koutamanis et. al 2020); and 'Purchase Intention' consists of four variables (Huang & Liu 2022; Pantano& Servidio2020).The scale for each of the constructs (refer table 1) was modified to suit the present context of the study and was finalized after examining the psychometric properties of the measurement model.

4.3 Data Analysis Techniques

The data analysis techniques consisted of descriptive statistical techniques. Partial Least Square (PLS) based Structural Equation Modeling(SEM) was employed to assess the relationship between the hypothesized constructs. Bootsrapping technique (constituting 5000-resamples) was applied to assess the higher-order effect such as mediation analysis. Data Analysis Tools used was Smart-PLS 4.0 and SPSS Software (Version 22).

5. Data Analysis & Interpretation

There were two stages to the investigation of the created AR Experience model. The measurement model was evaluated first followed by the structural model.

5.1 Measurement Model

The factor loading ofall the latent constructs was found greater than 0.70, exceeding the recommended threshold (Hair et al., 2017). This suggests that the observed indicators adequately captured the underlying construct. However, one item each from 'experiential value' and 'spatial presence' was removed due to poor factor loading of less than 0.60.The observed items of the latent constructs have been depicted in Table 1.

Table 1: Measurement Scale

Construct	Items	Source
Perceived Augmentation	The Augmented Reality App of IKEA helped me better visualize furniture in my home.	Yim & Park (2020); Huang & Liu (2022)
	The AR app of IKEA enhanced my shopping experience, inculcating within me a sense of perceived augmentation.	
	Using the IKEA app's AR feature augmented my ability to visualize and understand the product features as in real-time.	
	IKEA's AR App feature significantly enhanced my shopping experience by providing a more immersive and interactive way to explore the product.	
Spatial Presence	The AR feature in the IKEA app made me feel as if the virtual furniture was actually present in my physical space.	Kim & Lee (2020)
	When using the IKEA app's AR feature, I felt as if I was actually inside the virtual room.	
	The AR feature in the IKEA app created a sense of immersion and presence in the virtual environment.	
Experiential	The IKEA app's AR feature helped me to better imagine and visualize the furniture in my home.	Huang &

Value	The IKEA app's AR feature provided me with a unique and memorable shopping experience	Liu (2022)
	The IKEA app's AR feature allowed me to have a more immersive and realistic shopping experience.	
User Engagement	The IKEA app's AR experience was so engaging that I lost track of time.	Koutamanis et. al (2020)
	I found myself fully engaged and absorbed in the IKEA app's AR experience.	
	The IKEA app's AR feature motivated me to explore and interact with the virtual furniture.	
Purchase Intention	Using the IKEA app's AR feature increased my likelihood of purchasing furniture from IKEA.	Huang & Liu (2022); Pantano & Servidio (2020).
	The IKEA app's AR feature helped me to make a more informed purchasing decision.	
	The IKEA app's AR feature influenced my decision to purchase furniture from specific retailer.	
	The IKEA app's AR feature made me feel more confident in my purchasing decision.	

The Cronbach's alpha as well as composite reliability (rho_a and rho_c) values for all the constructs remained greater than 0.70 (refer table 2); thus, the reliability of the constructs was found satisfactory (Carmines & Zeller, 1988).

Table 2 Reliability and Convergent Validity

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Experiential Value	0.925	0.929	0.953	0.870
Perceived Augmentation	0.931	0.932	0.951	0.829
Purchase Intention	0.935	0.938	0.953	0.837
Spatial Presence	0.939	0.940	0.961	0.892
User Engagement	0.912	0.917	0.945	0.850

The content validity of the measurement scale was verified through existing literature related to augmented realityand subject expert's opinion. Further, the obtained CR and AVE values of all the latent constructs remained greater than 0.70 and 0.50 respectively; while, the CR values for each individual constructs remained greater than their respective AVE values(refer table 2) indicatingsufficiency of convergent validity (Hair et al 2017). Further, as per criteria, the square root of AVEof each of the latent constructs remained greater than the inter-construct correlationsformed by the respective constructs (refer 3), establishing sufficient discriminant validity (Fornell & Larcker, 1981).

Table 3 Discriminant Validity(Fornell-Larcker criterion)

	Experiential Value	**Perceived Augmentation**	**Purchase Intention**	**Spatial Presence**	**User Engagement**
Experiential Value	0.933				
Perceived Augmentation	0.765	0.910			
Purchase Intention	0.600	0.640	0.915		
Spatial Presence	0.563	0.594	0.470	0.944	
User Engagement	0.528	0.562	0.696	0.501	0.922

However, theFornell-Larcker criterion method has been criticized for being too conservative and potentially leading to Type II errors (Henseler et al., 2015).Recent studies have demonstrated the superiority of the HTMT ratio over the Fornell-Larcker criterion in assessing discriminant validity (Voorhees et al 2016). Thus, the present study reassessed discriminant validity based on HTMT ratio (refer Table 4) which has been proposed as a more sensitive and reliable method for assessing discriminant validity.

Table 4: Discriminant Validity(HTMT criterion)

	Experiential Value	Perceived Augmentation	Purchase Intention	Spatial Presence	User Engagement
Experiential Value					
Perceived Augmentation	0.823				
Purchase Intention	0.642	0.686			
Spatial Presence	0.603	0.635	0.501		
User Engagement	0.572	0.609	0.751	0.540	

The HTMT ratio is calculated as the ratio of the heterotrait correlation (i.e., the correlation between two different latent variables) to the monotrait correlation (i.e., the correlation between two indicators of the same latent variable). The HTMT ratio for the existing measurement model has been found less than 0.90indicating that the discriminant validity is sufficient (Henseler et al., 2015).

5.2 Structural Model

Subsequent to the measurement model, structural model analysis was performed to assess the statistical significance of the hypothesized relationships in the developed AR experience model. Bootstrapping resampling technique based on 5000 re-samples was employed to examinethe criticalities of complex behavioural relationships.

Primarily, the multi-collinearity between the variables was assessed, leading to unstable estimates of the regression coefficients (Kutner et al., 2005).One common method for detecting multi-collinearity is the Variance Inflation Factor (VIF) test. The VIF values for each of the variables in the present study remained less than 5, indicating there is no issue of collinearity among the items of the underlying constructs (Kutner et al 2015).

According to Hair et al. (2017), "R^2 values of 0.60 or higher are considered to be indicative of high predictive power" (p. 183).The R^2 value for the endogenous construct 'Experiential Value' was 0.61, indicating that 61% of the variance in purchase intention

was explained by the independent variables. Hair et al (2017) further depicted the range 0.19 ≤ R^2 ≤ 0.33 as moderate predictive power (p. 183). Thus, the R^2 values of purchase intention, spatial presence and user engagement in the present model remained 0.36, 0.35 and 0.27 respectively indicating the moderate predictive power of the model.

The f^2 value represents the incremental effect of the independent variable on the dependent variable(Cohen 1988).According to Cohen (1988), the f^2 values higher than 0.02, 0.15 and 0.35 represents small, medium and large effect size respectively. The results indicate that, elimination of 'perceived augmentation' will exert high effect on 'Experiential Value', and 'Spatial Presence' of 0.72 and 0.54 respectively confirming large effect of perceived augmentation on both the dependent variables. Further, 'experiential value' has also been witnessed to have large effect on 'purchase intention' and 'user engagement' with f^2 values of 0.56 and 0.38 respectively. However, 'spatial presence' with f^2=0.04 exert medium effect on 'experiential value'.

Hair et al. (2017) recommend using SRMR values ≤ 0.08 as an indicator of good model fit.The SRMR value of the existing AR Experience model is 0.052which is less than the threshold value of 0.08; indicating a good fit of the model (Hair et al., 2017).

Path Analysis

The obtained structural model (refer fig. 2) of AR Experience was tested in order to obtain thesignificance of thehypothesized relationship between the variables under the lens of the mentioned human-AI interaction theories providing base for literary specifications of the proposed model.

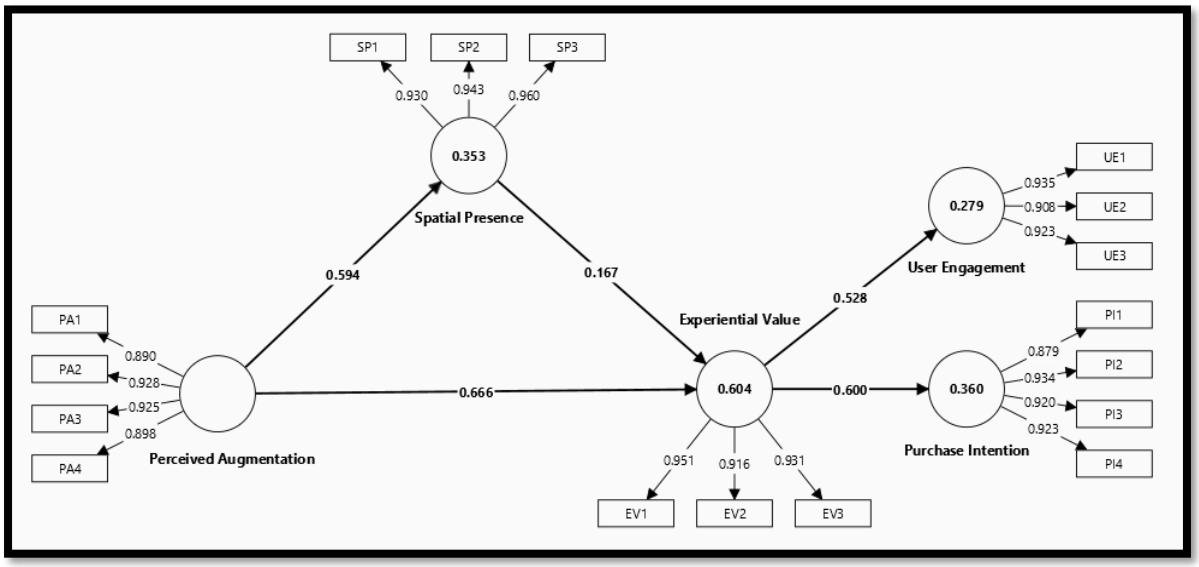

Fig.2Structural Model: AR Experience

The results have been depicted in Table5

The path coefficients of both direct and indirect relationships pertaining to AR Experience model have been depicted in Table 5:

Table 5: Path Coefficients

Relationship between the constructs	β Coefficients	p Value
Direct Effect		
Perceived Augmentation->Experiential Value	0.666	0.000
Perceived Augmentation->Spatial Presence	0.594	0.000
Spatial Presence->Experiential Value	0.167	0.001
Experiential Value->User Engagement	0.528	0.000
Experiential Value ->Purchase Intention	0.600	0.000
Indirect Effect		
Perceived Augmentation -> Spatial Presence -> Experiential Value	0.099	0.002
Total Effect		
Perceived Augmentation->Experiential Value	0.765	0.000

Note: Estimates (β) = "standardized beta coefficient"; p Value = "two-tailed significance" at 95% C.I.

Hypothesis Testing

Based on the results illustrated in Table 5, hypothesis testing was done. It was found that, 'Perceived Augmentation' had a positiveeffect on 'Experiential Value' with β = 0.666& p value = 0.000 at 95% CI; supporting **H1** hypothesis. It was found that, 'Perceived Augmentation' had a positive effect on 'Spatial Presence' with β = 0.594& p value = 0.000 at 95% CI; supporting **H2a** hypothesis; while, 'Spatial Presence' had a positive effect on 'Experiential Value' with β = 0.167& p value = 0.001 at 95% CI; supporting **H2b**hypothesis. Further, 'Perceived Augmentation' had a positive indirect effect on 'Experiential Value' through 'Spatial Presence' with β = 0.099& p value = 0.002 at 95% CI; supporting **H2c** hypothesis. Thus, 'Spatial Presence' positively mediates the relationship of 'Perceived Augmentation' and 'Experiential Value' supporting **H2** hypothesis. Further, the results depicted that, 'Experiential Value' positively lead to 'User Engagement' and 'Purchase Intention' with β = 0.528& p value = 0.000 at 95% CI; supporting **H3**and **H4**hypothesis respectively.

6. Discussion and Conclusion

AR experiences can create experiential value by providing immersive, interactive, and engaging experiences (Kim et al 2018). Research has shown that AR experiences can lead to increased experiential value in various contexts, including tourism, retail, and education (Yim & Park 2019). Supporting the existing literature, the presented study

witnessed that augmented reality-basede-commerce apps create a positive experiential value among customers in the context of online shopping of products through such apps.AR technology can create a sense of spatial presence by overlaying virtual information onto real-world environments. As noted earlier, AR-based online shopping apps can create a sense of spatial presence, leading to enhanced experience value for shoppers (Kim & Lee 2015). In this line, researchers have shown that spatial presence positively influences shoppers' perceived enjoyment, satisfaction, and experience (Choi & Kim 2021; Tom Dieck & Jung 2018). Further, a study by Yim and Park (2019) found that AR-based online shopping apps created a sense of spatial presence, which positively influence shoppers' perceived usefulness and enjoyment (Wang & Li 2022).Extending the classical theories, the present study established a mediating effect of spatial presence in the relationship of perceived augmentation and experiential value. When consumers experience high levels of perceived augmentation, they are more likely to feel a sense of spatial presence, which in turn enhances their experiential value. This is because spatial presence allows consumers to become fully engaged in the AR experience, increasing their sense of immersion and enjoyment.The mediating effect of spatial presence has been explained through the lens of the experiential value theory; according to the which, the experiential value is derived from advanced technological stimuli supported by media richness theory. Spatial presence is a key factor in enhancing experiential value, as it allows consumers to make the experience real. Research has shown that experiential value positively influences user engagement (Kim et al, 2018). Further, researchers argued that, experiential value obtained through user engagement is expected to bring conative reciprocations in terms of purchase intentions (Kang & Lee 2022; Lee & Kim 2021). Analysing the buyer behaviour in the context, the present study found that, such experiential value leads to user engagement and generate purchase intentions among them to purchase product evaluated through AR-based apps in B2C e-commerce.

7. Implications of the Study

The obtained 'Augmented Reality Experience' model extends the experiential value theory by highlighting the role of spatial presence in creating experiential value in augmented reality shopping apps. It contributes to the spatial presence theory by demonstrating its impact on experiential value and subsequent user engagement and purchase intention. It also extends the applicability of media richness theory and the theory of reasoned action by establishing a comprehensive understanding of buyer behaviour in augmented reality shopping apps.

Marketers can leverage the findings of this study to create immersive and engaging augmented reality (AR) shopping experiences. To achieve this, marketers should focus on designing AR experiences that create a sense of spatial presence, leading to increased experiential value and user engagement. By prioritizing experiential value over functional value, marketers can differentiate their AR shopping apps and provide unique experiences that drive user engagement and purchase intention. Moreover,

marketers may continuously monitor user feedback to identify areas for improvement and optimize their AR shopping apps for maximum experiential value.

8. Limitations of the Study

Respondent biasness is a concern, as the sample may not be representative of the entire population, and respondents may have provided answers that were socially acceptable rather than their true opinions or behaviours. Additionally, the study's focus on the B2C retail sector limits its generalizability to other industries or sectors, such as B2B, healthcare, or education. Future research should aim to replicate the study in other sectors, explore the impact of other technologies, and use more diverse samples to increase the generalizability of the findings.

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