Are Consumers Ready to Shop in Immersive Shopping Environments (ISE)? A Pilot Study to Explore the Factors

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Abstract: Extended Reality (XR) and immersive technologies are redefining the retail landscape by offering interactive, experiential alternatives to conventional online shopping. Immersive experiences within XR shopping platforms have the potential to create distinctive consumer journeys, enabling social interaction that fosters trust and strengthens purchase intentions. This pilot study investigates factors influencing consumers' purchase intentions and expected experiences within immersive shopping environments (ISE), using Meta's Horizon Worlds as a case. Specifically, it examines the key roles of immersive experiences, such as social presence, social interaction, and social support, in shaping trust, electronic word-of-mouth (eWOM), and technology acceptance. Beyond social dimensions, this study conceptually situates ISE within immersive user experience (UX) research, acknowledging the importance of sensory engagement, interactivity, realism, and avatar embodiment as foundational characteristics of immersive commerce.Findings reveal that social presence and support significantly enhance trust, while social interaction does not. This non-significant effect suggests that not all immersive social interactions translate into meaningful trust formation, particularly when avatar-mediated exchanges lack emotional richness or perceived authenticity.

Keywords: Immersive Shopping Environment, Word-of-Mouth, Immersive Experiences, Purchase Intention, social interaction.

1. INTRODUCTION

The past few years have witnessed rapid advancements in virtual shopping technologies, spanning from augmented reality (AR) try-ons to fully immersive extended reality (XR) experiences, driven by consumer demand for engaging and personalized purchasing journeys. These innovations are reshaping the retail landscape by offering interactive, immersive and experiential alternatives to traditional virtual shopping practices. Moreover, the broader virtual shopping platforms sector, currently valued at an estimated US $15 billion in 2025, is forecasted to surge to US $75 billion by 2033, fuelled by the rapid adoption of XR shopping experiences across industries (DiMarket, 2024). This growth trajectory highlights the strategic significance of comprehending anticipated consumer shopping experiences within immersive environments. Despite the profound transformations in the technological landscape, foundational principles of social interaction, social presence, and social support within shopping contexts remain pertinent—particularly regarding consumer-to-consumer dialogue and word-of-mouth (WOM) communication. Such interactions are instrumental in cultivating trust and fostering purchase intentions. In the context of immersive shopping environments, Meta's Horizon Worlds offers a compelling case for investigating electronic word-of-mouth (eWOM) dynamics within socially immersive platforms. Horizon Worlds facilitates avatar-based interactions, real-time conversations, and experience sharing in a highly interactive setting, thereby creating conditions conducive to organic WOM exchanges. These exchanges occur through interpersonal interactions rather than conventional text-based reviews, presenting unique opportunities for influence and recommendation dissemination. However, immersive shopping environment (ISE) (e.g. Horizon Worlds) is still in their nascent stage and have not achieved widespread adoption for commercial transactions. Consequently, this pilot study seeks to explore the potential of leveraging such platforms for shopping activities, with a particular focus on how social presence and interaction may shape eWOM experiences in future immersive commerce scenarios.

2. LITERATURE REVIEW AND HYPOTHESIS SETTING

Social interaction is a core characteristic that differentiates ISE from traditional online retailing. Within ISE, users interact through avatars, share content, and exchange information in communities built around shared interests, creating a richer and more engaging transactional experience. These interactions often lead to behavioral and attitudinal changes, aligning with Deci and colleagues' (1994) concept of internalization, where individuals adopt beliefs and behaviors through intrinsically rewarding social exchanges such as peer recommendations and collaborative activities. Such dynamics foster eWOM, an evolution of traditional WOM that is both scalable and traceable, exerting a profound influence on consumer trust and purchase

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decisions. Empirical studies consistently demonstrate that social engagement within ISE strengthens interpersonal relationships, enhances trust, and ultimately drives consumer experiences. Despite the social interaction, social support plays a critical role in shaping consumers experiences in virtual environments. Traditionally defined as perceived care and assistance within social networks (Li *et al*., 2023; Cohen & Wills, 1985). In ISE contexts, these forms of support are facilitated by advanced social technologies, enabling consumers to share product information, and provide shopping recommendations. Virtual communities thus become spaces where users seek and provide reciprocal support, reinforcing trust and loyalty (Liang *et al*., 2011). This exchange of supportive information not only strengthens relationship quality but also stimulates eWOM experiences.

Likewise, social presence, defined as the extent to which a medium enables users to perceive others as psychologically present (Oh *et al*., 2018), is a critical factor distinguishing ISE from other single-way online shopping activities. High social presence fosters warm, personal, and sociable interactions during online purchasing, creating a sense of interpersonal connection that enhances trust (Zhang & Wang, 2012). In ISE, strong social presence amplifies these effects by enabling real-time, avatar-based interactions, whereas low social presence can undermine trust and reduce engagement (Beldad *et al*., 2010). Platforms that successfully cultivate social presence encourage consumers to share reviews and ratings, which significantly influence purchase decisions. Beyond social presence, perceived enjoyment plays a vital role in shaping the consumers' experiences. Enjoyment is one of the key drivers of purchase intention and continued platform use (Nguyen *et al*., 2025; Lam *et al*., 2014). Many consumers engage with social shopping platforms for entertainment and satisfaction, which enhances their overall experience and acceptance (Lau & Lee, 2019). Consequently, platforms designed to maximize enjoyment foster positive attitudes toward social commerce and strengthen user loyalty. It is important to note that, the technology acceptance factors, perceived usefulness and perceived ease of use, further influence consumer adoption of ISE. Perceived usefulness, defined as the degree to which a person believes that using a system enhances performance (Davis, 1989), has been shown to predict user satisfaction and purchase intention in online shopping contexts (Kim, 2011). Similarly, perceived ease of use, referring to the belief that a system is free of effort (Davis, 1989), positively impacts online purchase intention, as consumers prefer platforms that are intuitive and user-friendly (Lau & Lee, 2018). Empirical studies confirm that both perceived usefulness and ease of use significantly affect acceptance and continued use of virtual shopping sites (Lau & Lee, 2018; 2019).

Trust is a fundamental construct in online and social commerce, defined as the confidence in a partner's ability, integrity, and willingness to maintain a reliable business relationship (Schurr & Ozanne, 1985). In the context of consumer shopping experiences, trust is commonly categorized into two dimensions: cognitive trust and emotional trust. Cognitive trust reflects consumers' belief in a service provider's competence and consistency, grounded in rational evaluation of performance and reliability (Lewis & Weigert, 1985). Emotional trust, by contrast, arises from affective judgments based on perceived care and concern demonstrated by the firm, forming a personalized emotional bond between consumers and businesses (Rempel *et al*., 1985). While cognitive trust is built through observable behaviors and transactional integrity, emotional trust develops through relational experiences that evoke feelings of security and attachment. Prior research underscores the importance of trust in mitigating perceived risk and fostering purchase intentions in online contexts. For instance, Kim and Park (2013) found that social commerce attributes, such as reputation, platform size, information quality, communication, and word-of-mouth referrals, positively influence consumer trust. Similarly, Hsiao and colleagues (2010) examined trust in product recommendations within social networks, identifying perceived ability, benevolence/integrity, and critical mass as key drivers of trust in peer-generated content. These factors not only enhance trust in recommendations but also exert direct and indirect positive effects on purchase intentions. Given the heightened uncertainty and lack of face-to-face interaction in virtual settings, trust plays a pivotal role in reducing perceived risk and enabling confident decision-making (Bulsara & Vaghela, 2023) When consumers trust reviews and recommendations on social shopping platforms, they are more likely to engage in transactions, reinforcing trust as a critical determinant of purchase experiences.

Moreover, eWOM refers to positive or negative online statements about products or companies shared by consumers (Hennig-Thurau *et al*., 2004). It includes reviews, recommendations, and community

discussions, serving as a major source of purchase-related information. Trust is critical, as consumers often rely on peer recommendations over expert opinions (Bulsara & Vaghela, 2023). Positive eWOM enhances confidence and purchase intention (Erkan & Evans, 2018; Beck *et al*., 2023). Researchers have extended the Technology Acceptance Model (TAM) by adding social factors, such as social presence and enjoyment, to explain adoption of social shopping platforms (Oh *et al*., 2018). These platforms not only provide information but also foster community and hedonic experiences, which strengthen purchase intention.

Shopping within ISE integrates the characteristics of traditional online shopping activities with the interactive features of social networking platforms. These environments serve a dual purpose: providing consumers with informational resources while simultaneously enabling product acquisition. Drawing on the preceding discussion, a conceptual model is proposed, grounded in social presence theory, the influence of eWOM, and the TAM. Based on the preceding discussion, 12 hypotheses have been formulated to examine the relationships among key constructs, as illustrated in Figure **1**. These hypotheses are derived from social presence theory, the TAM, and the influence of eWOM. Furthermore, a conceptual model and corresponding research design have been developed to guide the empirical pilot study, as presented in Figure **2**. This framework provides the foundation for testing the proposed hypotheses and validating the theoretical relationships in ISE context.

In addition, to assess the relationships between consumer-related variables and outcomes such as trust and eWOM, a series of statements are developed. These items captured dimensions of social interaction, social support, and social presence. Measurement scales were adapted from established instruments by Kim and Ko (2010) and Zhang and colleagues (2014),

Hypothesis Setting	
H1a	Social interaction will positively influence consumers' trust in ISE
H1b	Social support will positively influence consumers' trust in ISE
H1c	Social presence will positively influence consumers' trust in ISE
H2a	Social interaction will positively influence electronic word of mouth in ISE
H2b	Social support will positively influence electronic word of mouth in ISE
H2c	Social presence will positively influence electronic word of mouth in ISE
H3a	Perceived enjoyment has a positive effect on the acceptance of the ISE
H3b	Perceived usefulness has a positive effect on the acceptance of the ISE
H3c	Perceived ease of use has a positive effect on the acceptance of the ISE
H4	Consumers' trust has a positive effect on the purchase intention in ISE
H5	Electronic word of mouth has a positive effect on the purchase intention in ISE
H6	The acceptance of the use of social commerce has a positive effect on the purchase intention in ISE

Figure 1: Summary of the hypothesis setting.

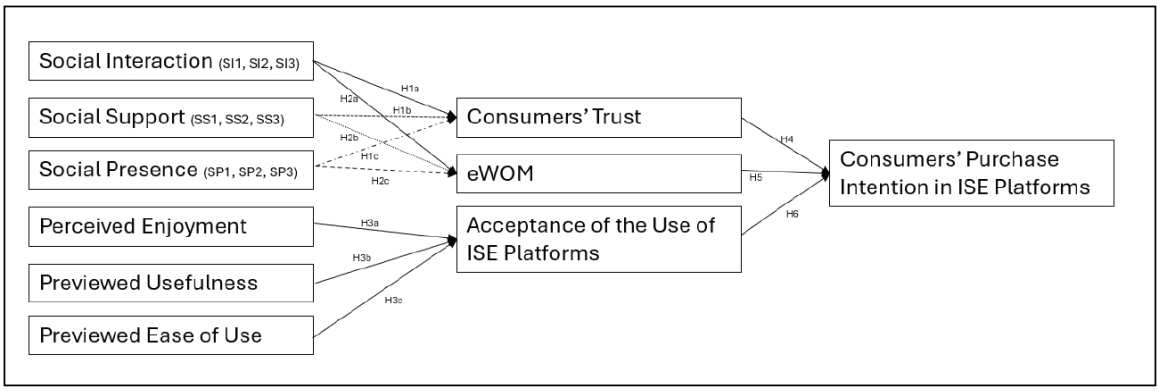

Figure 2: The conceptual model and research design.

Table 1: The Scales of Social Interaction, Social Support and Social Presence

Constructs	Item	Statement
Social Interaction	SI1	Horizon Worlds allows participants to establish social relationships within the immersive environment.
	SI2	Horizon Worlds enables me to build a trustworthy relationship with other participants in the environment.
	SI3	Horizon Worlds enables me to share information with other participants within the immersive environment.
Social Support	SS1	When I encounter difficulties during purchasing, some participants on Horizon Worlds provide comfort and encouragement.
	SS2	When I encounter a purchasing problem, some participants on Horizon Worlds provide information to help me resolve the issue.
	SS3	When I encounter a purchasing problem, the suggestions provided by some participants on Horizon Worlds are practical and feasible.
Social Presence	SP1	When browsing Horizon Worlds, interactions with other participants are warm and friendly.
	SP2	When browsing Horizon Worlds, interactions with other participants are trustworthy.
	SP3	When browsing Horizon Worlds, interaction with other participants is encouraged.

with modifications to align with the study context. The revised measures (See Table **1**) aimed to evaluate the influence of these three factors on consumers' trust and eWOM within ISE (the Horizon World).

This pilot research also examines the relationship between key ISE variables and consumers' acceptance of ISE. Specifically, the constructs of perceived enjoyment, perceived usefulness, and perceived ease of use are assessed. Measurement items were adapted from validated scales developed by Nusair and colleagues (2013), with modifications to fit the context of this study. These revised instruments aim to capture the influence of these factors on consumers' expected purchase intention to adopt and engage with ISE (See Table **2**).

Immersive shopping environments differ fundamentally from conventional social commerce through their reliance on immersive user experience (UX) characteristics, including sensory engagement, spatial presence, interactivity, realism, and avatar embodiment. These features influence how users perceive authenticity, emotional connection, and agency within virtual environments. Prior XR research suggests that immersive realism and embodied interaction can heighten engagement and perceived value, but may also introduce friction if interactions feel artificial or cognitively demanding. Despite their centrality, such immersive-specific UX dimensions remain underexplored in empirical models of immersive shopping acceptance, particularly in early-stage social-VR commerce contexts. This study responds to this gap by positioning social presence and interaction as experiential proxies for broader immersive UX mechanisms.

3. RESEARCH METHODS

The primary objective of this pilot study is to investigate the factors influencing consumers' purchase intention and understand their expected shopping experiences within ISE, specifically focusing on their experiences of consumers' trust, eWOM, and

Table 2: Scales of Perceived Enjoyment, Perceived Usefulness and Perceived Ease of Use

Constructs	Item	Statement
Perceived Enjoyment	PE1	I had fun using Horizon Worlds.
	PE2	It is interesting to use Horizon Worlds
	PE3	I enjoy spending time on Horizon Worlds
Perceived Usefulness	PU1	Horizon Worlds provides useful shopping information
	PU2	Horizon Worlds assists me in making purchase decisions.
Perceived Ease of Use	EU1	Horizon Worlds offers user-friendly functions.
	EU2	Horizon Worlds offers timely shopping information.

technology acceptance. To empirically test the proposed hypotheses, primary data are collected through a structured questionnaire employing a quantitative research approach. A descriptive research design is adopted to provide a comprehensive overview of the phenomenon and to clearly identify the key variables under investigation.

3.1. Questionnaire Setting

A questionnaire is employed to collect a substantial dataset for examining the impact of expected consumers' shopping experiences within ISP. The survey instrument comprised three sections with a total of 37 questions. Section One includes items related to general perceptions of ISP and virtual shopping experiences, serving as a screening mechanism to exclude respondents without prior experience using such platforms. Section Two focuses on factors influencing purchase intention and their expected shopping experiences in ISP, incorporating 25 statements measured on a 5-point Likert scale to ensure precision and reliability in responses. Section Three gathers demographic information, including age, gender, monthly income, education level, and occupation, to facilitate segmentation and contextual analysis.

3.2. Data Analysis Method

The survey data are analyzed using the Statistical Package for the Social Sciences (SPSS). A series of statistical tests and analytical procedures are conducted within the software to ensure rigorous data examination. Descriptive statistics are first applied to summarize the dataset and assess its key characteristics. These include measures of central tendency (mean and mode), measures of dispersion (range and variance), and frequency distributions to illustrate the occurrence patterns of responses across variables.

3.3. Sampling

The data collection is conducted in June 2025 using an online survey distributed via Google Forms, ensuring accessibility for respondents familiar with social networking platforms. A total of 73 participants is asked to experience a 30-minutes tour and consumer-to-consumer interaction in the ISP, which is the Meta' Horizon Worlds (https://horizon.meta.com/), and complete the questionnaire, and all responses pass the screening criteria, resulting in 73 valid cases for analysis. Random sampling is employed to recruit respondents, thereby enhancing the representativeness of the sample and reducing selection bias.

3.4. Instrument

Meta's Horizon Worlds was utilized as the experiential platform to immerse participants in immersive shopping activities. All participants are required to register on the platform, complete a 30-minutes introductory tour, and actively engage with other consumers within this ISP. This process allows participants to interact through consumers (e.g. avatars), explore immersive shopping environments, and experience social features inherent to ISP. By simulating real-world shopping experiences in a virtual context, Horizon Worlds provided a controlled setting for observing social interaction, presence, and engagement, thereby ensuring ecological validity for the study. The exclusive use of Meta's Horizon Worlds as the experimental platform may limit generalizability, as not all immersive shopping environments are social-VR based. However, Horizon Worlds was selected due to its integrated avatar embodiment, real-time social interaction, and immersive spatial design, which collectively represent a high-engagement form of immersive commerce. These features provide insight into advanced ISE scenarios while offering a foundation for future comparisons with AR-based or single-user immersive retail platforms.

3.5. Limitation

This study has several limitations. The use of non-probability sampling and online distribution via Google Forms may have led to uneven representation, including an imbalance in gender distribution. The sample size of 73 respondents is relatively small compared to the target population, limiting generalizability. In addition, the small sample size, while adequate for a pilot study, is likely homogeneous, limiting the ability to assess how diverse user backgrounds, levels of XR familiarity, or cultural differences shape immersive shopping experiences. Broader and more diverse samples are needed to understand variability in immersive trust formation and acceptance. Although measurement scales were adapted from validated instruments, they may not fully capture immersive-social constructs unique to ISE, such as co-presence, avatar-mediated non-verbal communication, virtual co-shopping behaviors, and embodied interaction. Future research should develop

immersive-specific measurement models that reflect experiential depth rather than traditional social commerce dimensions alone. The reliance on quantitative self-report measures constrains insight into real-time experiential dynamics within ISE. Behavioral metrics (e.g., interaction duration, movement patterns, gaze behavior) and qualitative feedback (e.g., interviews or think-aloud protocols) would enable richer analysis of immersive user journeys, moments of engagement, and experiential friction points.

4. RESULTS AND DISCUSSION

The following section presents the results of this pilot study. Table **3** summarizes the descriptive statistics for statements related to three consumer-related factors: social interaction (SI), social support (SS), and social presence (SP). Each item is assessed using a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"), with a midpoint score of 3 representing a neutral stance. The results indicate that all mean scores exceed the neutral value, suggesting that respondents generally perceive a positive level of social interaction, support, and presence within social commerce platforms.

Table 3: Descriptive Statistics for Consumer Variables

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
SI1	73	3.7999	.71243
SI2	73	3.8011	.76003
SI3	73	4.1006	.59802
SS1	73	3.7444	.89101
SS2	73	3.9033	.67995
SS3	73	3.8995	.67511
SP1	73	3.8501	.78986
SP2	73	3.7988	.78821
SP3	73	3.8432	.75949
Valid N (listwise)	73		

Table **4** presents the descriptive statistics for the ISE variables, which include three key constructs: perceived enjoyment (PE), perceived usefulness (PU), and perceived ease of use (EU). The mean scores for perceived enjoyment and perceived usefulness are approximately 4, suggesting that respondents generally agree that ISE provides an enjoyable experience and offer practical benefits. Additionally, the mean scores for perceived ease of use exceed the neutral midpoint of 3, indicating that participants perceive the ISE as relatively easy to navigate and operate.

Table 4: Descriptive Statistics for ISE Variables

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
PE1	73	4.0122	.59777
PE2	73	4.0699	.57897
PE3	73	4.0132	.65799
PU1	73	3.9778	.67068
PU2	73	3.8644	.72398
EU1	73	4.0155	.59692
EU2	73	4.0092	.62006
Valid N (listwise)	73		

A reliability test is conducted to verify whether questionnaire items accurately represented the proposed model's constructs. 9 tests are conducted for 6 independent variables (social interaction, social support, social presence, perceived enjoyment, perceived usefulness, perceived ease of use) and four dependent variables (consumers' trust, eWOM, the acceptance of the use of ISE and purchase intention). Cronbach's Alpha is used as the metric, with values ≥0.70 considered acceptable and >0.80 ideal. All variables exceeded 0.80, indicating excellent reliability; therefore, no items are removed.

Prior to multiple linear regression, Pearson correlation is applied to examine relationships among variables using their mean values at a 0.01 significance level. Correlation strength was interpreted using Cohen's guidelines: coefficients of 0.10–0.29 indicate a small association, 0.30–0.49 a medium association, and values above 0.50 a large association. The analysis focuses on three dependent variables: consumers' trust (CT), eWOM (EM), and acceptance of ISE usage (IU). Descriptive statistics in Table **5** reveal that all variables have mean scores exceeding 3, suggesting respondents generally agree that interactions on ISE are trustworthy. Additionally, participants show a tendency to share information from these sites with friends and family and exhibit a positive attitude toward expected immersive shopping experiences.

The Table **6** presents descriptive statistics for purchase intention (PI) in ISE. With mean scores exceeding 3 and approaching 4, the results suggest

that respondents are inclined to consider other consumers' expected purchase experiences and show a likelihood of purchase items in the future.

Table 5: Descriptive Statistics on Dependent Variables

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
CT1	73	3.8333	.73473
CT2	73	3.8889	.70302
CT3	73	3.8923	.75013
EM1	73	3.9769	.73205
EM2	73	3.8133	.88011
EM3	73	3.8702	.83988
IU1	73	3.9905	.68777
IU2	73	3.6511	.87532
IU3	73	3.8310	.71004
Valid N (listwise)	73		

Table 6: Descriptive Statistics on Purchase Intention

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
PI	73	4.0223	.69554
PI2	73	3.9923	.73733
Valid N (listwise)	73		

4.1. Correlation between Independent and Dependent Variables

Table **7** illustrates the correlations between consumers' trust (CT) and the variables of social interaction, social support, and social presence. The results indicate a strong positive and statistically significant relationship between consumers' trust and each of these variables, with significance established at the 0.01 level.

Table **8** presents the correlations between eWOM (EM) and the consumer-related variables: social interaction, social support, and social presence. The analysis shows that all variables are interrelated, with eWOM exhibiting a strong positive and statistically significant correlation with social interaction, social support, and social presence at the 0.01 significance level.

Table **9** summarizes the correlations between acceptance of ISE usage (IU) and key site-related variables: perceived enjoyment, perceived usefulness, and perceived ease of use. The correlation coefficients, ranging from 0.30 to 0.49, indicate a moderate positive relationship between IU and these three factors.

Table **10** shows that purchase intention (PI) is strongly correlated with consumers' trust (CT) and eWOM (EM), with coefficients above 0.50, highlighting their key influence on buying decisions. The correlation with acceptance of ISE usage (IU) is moderate, suggesting platform acceptance matters but less than trust and eWOM.

Multiple linear regression is used to examine the relationship between the dependent and independent variables. Model fit was assessed using the coefficient of determination (R^2), while F-tests ($p < 0.05$) evaluated overall significance and t-tests assessed individual predictors. Results are presented in three tables: model summary, ANOVA, and coefficients.

Table 7: Correlation between Consumers' Trust and Consumer Variables

Correlations					
		Mean CT	**Mean SI**	**Mean SS**	**Mean SP**
Mean CT	Pearson Correlation	1	.791**	.822**	.881**
	Sig. (2-tailed)		.000	.000	.000
	N	73	73	73	73
Mean SI	Pearson Correlation	.783**	1	.875**	.848**
	Sig. (2-tailed)	.000		.000	.000
	N	73	73	73	73
Mean SS	Pearson Correlation	.823**	.869**	1	.882**
	Sig. (2-tailed)	.000	.000		.000
	N	73	73	73	73
Mean SP	Pearson Correlation	.881**	.856**	.875**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	73	73	73	73

**. Correlation is significant at the 0.01 level (2-tailed).

Table 8: Correlations between eWOM and Consumer Variables

Correlations					
		Mean EM	**Mean SI**	**Mean SS**	**Mean SP**
Mean EM	Pearson Correlation	1	.741**	.722**	.812**
	Sig. (2-tailed)		.000	.000	.000
	N	73	73	73	73
Mean SI	Pearson Correlation	.742**	1	.869**	.856**
	Sig. (2-tailed)	.000		.000	.000
	N	73	73	73	73
Mean SS	Pearson Correlation	.721**	.869**	1	.868**
	Sig. (2-tailed)	.000	.000		.000
	N	73	73	73	73
Mean SP	Pearson Correlation	.802**	.851**	.875**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	73	73	73	73

**. Correlation is significant at the 0.01 level (2-tailed).

Table 9: Correlation between the Acceptance of the Use of ISE Variables

Correlations					
		Mean IU	**Mean PE**	**Mean PU**	**Mean EU**
Mean IU	Pearson Correlation	1	.362**	.406**	.366**
	Sig. (2-tailed)		.000	.000	.000
	N	73	73	73	73
Mean PE	Pearson Correlation	.364**	1	.809**	.858**
	Sig. (2-tailed)	.000		.000	.000
	N	73	73	73	73
Mean PU	Pearson Correlation	.411**	.809**	1	.832**
	Sig. (2-tailed)	.000	.000		.000
	N	73	73	73	73
Mean EU	Pearson Correlation	.361**	.859**	.833**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	73	73	73	73

**. Correlation is significant at the 0.01 level (2-tailed).

Table 10: Correlations between Purchase Intention and other Variables

Correlations					
		Mean PI	**Mean CT**	**Mean EM**	**Mean IU**
Mean PI	Pearson Correlation	1	.796**	.721**	.430**
	Sig. (2-tailed)		.000	.000	.000
	N	73	73	73	73
Mean CT	Pearson Correlation	.789**	1	.762**	.410**
	Sig. (2-tailed)	.000		.000	.000
	N	73	73	73	73
Mean EM	Pearson Correlation	.709**	.767**	1	.375**
	Sig. (2-tailed)	.000	.000		.000
	N	73	73	73	73
Mean IU	Pearson Correlation	.419**	.409**	.373**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	73	73	73	73

**. Correlation is significant at the 0.01 level (2-tailed).

Table 11: Result of Multiple Linear Regression Test for Consumers' Trust

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.883[a]	.777	.779	.31611

a. Predictors: (Constant), Mean SP, Mean SI, Mean SS.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	75.433	3	24.799	249.522	.000[b]
	Residual	20.699	202	.100		
	Total	96.222	206			

a. Dependent Variable: CT.
b. Predictors: (Constant), Mean SP, Mean SI, Mean SS.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.522	.139		3.692	.000
	Mean SI	.081	.079	.075	1.089	.269
	Mean SS	.181	.075	.182	2.319	.025
	Mean SP	.622	.061	.661	9.233	.000

a. Dependent Variable: CT.

4.1. Testing of Hypotheses 1 by Multiple Linear Regression

The findings from the multiple linear regression analysis indicate the relationship between consumers' trust (dependent variable) and the independent variables: Social Interaction, Social Support, and Social Presence. Table **11** shows an R^2 value of 0.777, indicating that Social Interaction, Social Support, and Social Presence collectively explain 77.7% of the variance in consumers' trust. The ANOVA results ($p = 0.000$) confirm the model's significance at the 0.05 level. Coefficient analysis reveals that Social Support ($p = 0.025$) and Social Presence ($p = 0.000$) are significant predictors, whereas Social Interaction ($p = 0.269$) is non-significant and should be removed from the model.

4.2. Testing of Hypotheses 2 by Multiple Linear Regression

The multiple linear regression analysis examining the relationship between eWOM (dependent variable) and the predictors, social interaction, social support, and social presence, is presented in Table **12**. It reports an R^2 of 0.661, indicating that social interaction, social support, and social presence explain 66.1% of the variance in eWOM (EM). The ANOVA results ($p = 0.000$) confirm the model's significance at the 0.05 level. Coefficient analysis shows social interaction ($p = 0.010$) and social presence ($p = 0.000$) are significant predictors, while social support ($p = 0.371$) is non-significant and should be excluded from the model.

4.3. Testing of Hypotheses 3 by Multiple Linear Regression

Table **13** shows an R^2 of 0.159, indicating that perceived enjoyment, perceived usefulness, and perceived ease of use explain 15.9% of the variance in acceptance of ISE. The ANOVA results ($p = 0.000$) confirm the model's significance. Coefficient analysis reveals that only perceived usefulness ($p = 0.013$) is a significant predictor, while perceived enjoyment ($p = 0.589$) and perceived ease of use ($p = 0.792$) are non-significant and should be excluded.

4.4. Testing of Hypotheses 4, 5 and 6 by Multiple Linear Regression

Table **14** presents the multiple linear regression results examining the impact of consumers' trust, electronic word-of-mouth, and acceptance of social commerce on purchase intention. It reports an R^2 of

Table 12: Result of Multiple Linear Regression Test for eWOM

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.811[a]	.661	.660	.43919

a. Predictors: (Constant), Mean SP, Mean SI, Mean SS.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	79.111	3	26.446	135.523	.000[b]
	Residual	41.006	203	.192		
	Total	120.132	209			

a. Dependent Variable: Mean EM.
b. Predictors: (Constant), Mean SP, Mean SI, Mean SS.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.407	.192		2.066	.038
	Mean SI	.279	.106	.232	2.603	.010
	Mean SS	-.093	.108	-.082	-.909	.371
	Mean SP	.721	.091	.691	7.699	.000

a. Dependent Variable: Mean EM.

Table 13: Result of Multiple Linear Regression Test for the Acceptance of the Use of ISE

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.402[a]	.159	.149	.41589

a. Predictors: (Constant), Mean EU, Mean PU, Mean PE.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	7.019	3	2.355	13.502	.000[b]
	Residual	35.888	206	.178		
	Total	42.898	209			

a. Dependent Variable: Mean IU.
b. Predictors: (Constant), Mean EU, Mean PU, Mean PE.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.633	.213		12.336	.000
	Mean PE	.059	.106	.077	.529	.589
	Mean PU	.212	.081	.312	2.549	.013
	Mean EU	.032	.139	.037	.268	.792

a. Dependent Variable: Mean IU.

Table 14: Result of Multiple Linear Regression Test for the Expected Purchase Intention

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.821[a]	.679	.667	.38666

a. Predictors: (Constant), Mean AU, Mean EM, Mean CT.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	62.399	3	20.799	137.489	.000[b]
	Residual	31.112	206	.152		
	Total	93.498	209			

a. Dependent Variable: Mean PI.
b. Predictors: (Constant), Mean IU, Mean EM, Mean CT.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.422	.241		1.778	.085
	Mean CT	.573	.066	.571	9.054	.000
	Mean EM	.221	.058	.239	3.899	.000
	Mean IU	.149	.063	.104	2.325	.024

a. Dependent Variable: Mean PI.

Table 15: Summary of Findings

Hypothesis		
H1a	Social interaction will positively influence consumers' trust in ISE	Rejected
H1b	Social support will positively influence consumers' trust in ISE	Supported
H1c	Social presence will positively influence consumers' trust in ISE	Supported
H2a	Social interaction will positively influence electronic word of mouth in ISE	Supported
H2b	Social support will positively influence electronic word of mouth in ISE	Rejected
H2c	Social presence will positively influence electronic word of mouth in ISE	Supported
H3a	Perceived enjoyment has a positive effect on the acceptance of the ISE	Rejected
H3b	Perceived usefulness has a positive effect on the acceptance of the ISE	Supported
H3c	Perceived ease of use has a positive effect on the acceptance of the ISE	Rejected
H4	Consumers' trust has a positive effect on the purchase intention in ISE	Supported
H5	Electronic word of mouth has a positive effect on the purchase intention in ISE	Supported
H6	The acceptance of the use of social commerce has a positive effect on the purchase intention in ISE	Supported

0.679, indicating that consumers' trust, electronic word-of-mouth, and acceptance of social commerce explain 67.9% of the variance in purchase intention. The ANOVA results ($p = 0.000$) confirm the model's significance at the 0.05 level. Coefficient analysis shows all predictors, consumers' trust ($p = 0.000$), eWOM ($p = 0.000$), and acceptance of ISE ($p = 0.024$), make significant contributions to the model. Additionally, acceptance of ISE is positively associated with perceived usefulness.

4.5. Summary of the Findings

Following regression analyses, hypothesis testing results are summarized as follows: Hypothesis 1 confirms that consumers' trust is significantly

influenced by social support and social presence, while social interaction shows no effect. Hypothesis 2 indicates that social interaction and social presence positively affect eWOM, whereas social support does not. For Hypothesis 3, perceived usefulness is the only significant predictor of acceptance of ISE. Finally, consumers' trust, eWOM, and acceptance of ISE are all positively related to expected purchase intention. Overall, 4 of 12 hypotheses are rejected. A summary of these findings is provided in Table **15**.

5. CONCLUSION AND IMPLICATIONS

The empirical findings of this pilot study investigate the proposed consumer variables: social interaction, social support, and social presence, in relation to consumer trust in ISE. The results indicate that both social support and social presence significantly enhance trust in ISE, consistent with the findings of Voicu and colleagues (2023). Regression analysis reveals that social presence has a more substantial effect than social support. Contrary to expectations, social interaction did not significantly influence trust formation in ISE. This finding may reflect UX-related limitations rather than a lack of social value. Avatar-based interactions in Horizon Worlds may be perceived as artificial, constrained in emotional expressiveness, or lacking non-verbal richness such as eye contact, tone, and subtle affective cues. As a result, users may engage socially without forming the emotional or cognitive assurance required for trust. This suggests that immersive interaction alone is insufficient; rather, the quality, realism, and emotional conveyance of interaction are critical trust-building mechanisms in ISE.

Privacy and data security concerns associated with biometric and behavioral tracking in immersive environments remain critical. Beyond technical risk, such concerns directly affect user experience by shaping perceptions of transparency, control, and psychological safety. In immersive environments where bodily movements and attention are continuously tracked, trust is closely tied to users' perceived agency and understanding of data use. Integrating privacy-by-design principles into immersive UX is therefore essential for sustainable adoption.

Furthermore, the analysis of consumer variables and eWOM indicates that both social interaction and social presence have significant positive relationships with eWOM, aligning with the findings of Beck and colleagues (2023), which suggest that eWOM is strongly influenced by social ties, such as community referrals.

This study also investigates the relationships among perceived enjoyment, perceived usefulness, and perceived ease of use regarding the acceptance of ISE. The findings reveal that perceived usefulness is a significant predictor of acceptance, aligning with the conclusions drawn by Ramayah and Ignatius (2005). In contrast, perceived enjoyment and perceived ease of use do not demonstrate significant effects. While perceived enjoyment is frequently identified as a key driver of VR and AR adoption, it did not significantly influence ISE acceptance in this study. This divergence from prior XR literature may indicate that participants approached immersive shopping with a predominantly utilitarian mindset, prioritizing informational efficiency and decision support over hedonic pleasure. In early-stage immersive commerce, users may perceive enjoyment as secondary to functional usefulness, particularly when platforms are unfamiliar or cognitively demanding. This finding highlights a potential shift from hedonic to utilitarian motivations in emerging immersive shopping experiences.These outcomes suggest that perceived usefulness is the primary determinant of ISE adoption. Moreover, the analysis confirms that factors such as consumer trust, eWOM, and acceptance of ISE positively influence purchase intention. In agreement with Weisberg and colleagues (2011), trust emerges as the most critical factor impacting purchase decisions. The regression analysis indicates that trust has the most significant influence on consumers' expected purchase intention, followed by eWOM, with acceptance of ISE exerting the least amount of impact.

In addition, this study explores factors influencing consumers' expected purchase intention in ISE by examining consumer-related and ISE-related variables. Findings show that social support and social presence strengthen consumers' trust, while social interaction does not. Social interaction and social presence enhance eWOM, whereas social support does not. Among ISE variables, only perceived usefulness significantly predicts acceptance of ISE. Consumers' trust, eWOM, and acceptance collectively influence consumers' expected purchase intention, with trust exerting the strongest effect.

From a design perspective, the findings suggest several actionable guidelines for immersive shopping environment developers. First, social presence should be architected through realistic avatar embodiment, expressive non-verbal cues, and spatial audio to enhance emotional connection. Second, eWOM should be integrated organically through shared immersive experiences rather than static review formats. Third,

trust can be reinforced through interface cues that signal transparency, user control, and platform reliability. Finally, immersive UX design should balance functional usefulness with gradual hedonic engagement to support both utilitarian and experiential motivations.

Future research should further investigate trust as a key driver of consumers' immersive experiences in ISE.

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CONFLICTS OF INTEREST

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ETHICAL APPROVAL

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