

CUSTOMER EXPERIENCE IN MOBILE AUGMENTED REALITY RETAIL APPLICATIONS: A CONCEPTUAL FRAMEWORK OF ANTECEDENTS AND CONSEQUENCES IN VIETNAM

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ABSTRACT

As immersive retail technologies gain strategic relevance, understanding how mobile augmented reality (MAR) shapes customer experience has become increasingly important. However, prior research has focused predominantly on technology adoption and on developed-market settings, offering limited explanation of how virtual customer experience is formed in emerging economies such as Vietnam. This conceptual paper develops an integrated framework by combining Service-Dominant Logic and the Stimulus–Organism–Response paradigm. The model proposes that virtual customer experience in MAR retail applications is shaped by two categories of stimuli: technological affordances, including immersion, interactivity, and imagination, and usage motivations, including hedonic, normative, and gain-oriented motives. This experience subsequently influences customer satisfaction and purchase intention. By positioning virtual customer experience as a higher-order multidimensional organismic state, the paper extends MAR research beyond adoption-centered perspectives and provides a theoretically grounded agenda for future empirical testing in emerging-market retail contexts.

Keywords: Mobile augmented reality, customer experience, customer satisfaction, purchase intention, Vietnam, emerging markets.

1. INTRODUCTION

Retailing is entering an era of technology-infused competition, in which digital touchpoints are no longer peripheral but central to how firms design, deliver, and differentiate value [1]. As consumers spend more time in digitally mediated environments, retailers are increasingly deploying immersive technologies—such as augmented reality (AR), virtual reality (VR), and metaverse-enabled interfaces—to create richer forms of engagement and to extend the customer journey beyond the constraints of physical stores [2,3]. These technologies are evolving from novel add-ons into strategically meaningful service interfaces that blend physical and digital cues and enable phygital experiences across search, evaluation, and purchase stages [4,5]. Among these innovations, mobile augmented reality (MAR) applications have become especially prominent in retail because they allow consumers to overlay digital information onto the physical world in real time. MAR tools (e.g., virtual try-on, AR product visualization) can reduce perceived uncertainty, support product evaluation, and increase decision confidence by enabling consumers to “experience” products before purchase [3,6]. Yet the strategic value of MAR ultimately depends not only on adoption, but

on how customers experience these interactions and how that experience translates into satisfaction and purchase-related outcomes.

Customer experience (CX) is widely recognized as a holistic and multidimensional phenomenon reflecting customers' cognitive, affective, behavioral, sensorial, and relational responses across firm-controlled and customer-controlled touchpoints. However, research on CX in MAR apps remains uneven in both context and conceptualization. Much of the current evidence base is derived from developed markets, where consumers often have higher digital literacy and more stable access to advanced infrastructure, limiting the portability of existing explanations to emerging economies [7]. This imbalance is consequential because the formation of experience in immersive environments is likely shaped by contextual conditions such as retail modernization, technology familiarity, and the maturity of platform ecosystems.

Vietnam matters theoretically not merely as an under-researched setting, but as a context in which rapid digitalization coexists with heterogeneous technology familiarity, strong social influence, and evolving trust in online retailing [6]. These characteristics make it plausible that the effects of MAR affordances and usage motivations on virtual customer experience may not fully mirror those observed in developed markets. While recent studies have begun to examine immersive retail technologies in Vietnam, the literature still lacks an integrative account of (i) the technological affordances of MAR that make experiences compelling, (ii) the motivational drivers that explain why consumers engage with MAR in the first place, and (iii) how these antecedents jointly produce a multidimensional virtual CX and its downstream consequences for satisfaction and purchase intention [3]. Moreover, boundary conditions remain under-theorized: technology-acceptance lenses such as TAM/UTAUT often underplay individual psychological differences, even though traits and capabilities (e.g., emotional intelligence and personality dispositions) may systematically shape how consumers interpret virtual cues and convert experience into behavioral responses—especially in emerging-market contexts [3].

Despite growing research on AR-enabled retailing, three gaps remain. First, prior studies have concentrated more on adoption- or continuance-related outcomes than on the formation of virtual customer experience itself. Second, existing studies rarely integrate technological affordances and consumer motivations within a single explanatory framework. Third, evidence is still limited regarding emerging-market contexts, where digital capability, social influence, and trust in online retailing may shape MAR experiences differently from developed markets. To address these gaps, this conceptual paper develops an integrated framework of virtual customer experience in MAR-enabled retailing in Vietnam by combining Service-Dominant (S-D) Logic and the Stimulus–Organism–Response (S-O-R) paradigm. S-D Logic positions customers as active resource integrators and value co-creators, highlighting how value emerges through interactions with technology-enabled service interfaces rather than being embedded solely in products [8,9]. Building on this view, S-O-R provides a parsimonious structure for theorizing how external triggers (Stimuli)-conceptualized here as MAR affordances and consumer motivations-shape customers' internal experiential states (Organism: multidimensional virtual CX), which in turn drive evaluative and behavioral outcomes (Response) [10,11].

This paper contributes to the literature on MAR retailing and customer experience in three ways. First, it shifts the analytical focus from technology adoption to customer experience formation by positioning virtual customer experience as the central organismic mechanism in MAR-enabled retailing. Second, it integrates two key categories of antecedents—technological affordances and usage motivations—within a unified S-O-R framework, thereby offering a more parsimonious explanation of how MAR experiences are formed and translated into post-experience outcomes. Specifically, it addresses the following research questions:

RQ1: Which technological affordances and usage motivations are most relevant in explaining virtual customer experience in MAR retail applications?

RQ2: How does virtual customer experience mediate the relationship between MAR-related stimuli and downstream consumer outcomes?

RQ3: How does the emerging-market context of Vietnam strengthen the relevance of the proposed framework?

2. METHODOLOGY

Data were collected from two major databases, Scopus and Web of Science (WoS), on March 18, 2026, with a focus on customer experience, augmented reality, virtual try-on, immersive retail, and related digital shopping environments. The literature review served to identify recurring constructs, theoretical patterns, and underexplored relationships relevant to MAR-enabled retailing in emerging-market contexts. A rigorous multi-stage screening procedure was applied based on specific inclusion and exclusion criteria, focusing on English-language academic articles and reviews published between 2016 and 2026 within business, management, and related social science disciplines. In Scopus, the initial search yielded 3,004 records, which were systematically filtered down by document type, language, subject area, and publication period to a final dataset of 592 records. Similarly, the initial search in WoS returned 1,273 records, which were refined using the corresponding criteria to yield 430 records. Following the screening phase, the extracted records from both databases were exported and combined. The BiblioMerge tool was then used to merge the datasets, detect and eliminate duplicate records, and standardize the metadata. This rigorous data cleaning process ensured a highly reliable and consistent dataset.

3. THEORETICAL BACKGROUND

3.1. Service-Dominant (S-D) Logic in virtual retail

The conceptual foundation of this study is rooted in Service-Dominant (S-D) Logic, which posits that value is not inherent in tangible goods but is co-created through the integration of resources between the firm and the beneficiary [12]. In the context of virtual retail technologies (e.g., MAR apps), S-D Logic provides a critical lens for understanding customer experience. Unlike traditional e-commerce, where the interface serves primarily as a transactional medium, virtual technologies act as platforms for resource integration where customers actively participate in the service delivery process [13].

Within this framework, the customer is not a passive recipient of a virtual atmosphere but an active co-creator who integrates their own operant resources (e.g., skills, imagination, technology readiness) with the firm's operand resources (e.g., digital artifacts) to generate value-in-use [9]. For instance, when a Vietnamese consumer uses a MAR app to try on cosmetics or visualize furniture at home, the user actively integrates personal skills, imagination, and situational context with the retailer's digital interface to co-create value-in-use. This perspective shifts the focus from the technological features themselves to the experience derived from their usage. In the present model, S-D Logic provides the ontological view of MAR as a service interface through which value is co-created, while S-O-R provides the process logic explaining how MAR-related stimuli are transformed into internal experiential states and then into evaluative and behavioral responses. Thus, the two lenses play complementary roles rather than competing ones: S-D Logic provides the ontological rationale for viewing MAR as a co-creative service interface, while S-O-R provides the causal architecture for modeling how stimuli translate into experiential and behavioral outcomes.

3.2. The Stimulus-Organism-Response (S-O-R) framework

To operationalize the mechanism of virtual customer experience, this study adopts the Stimulus-Organism-Response (S-O-R) framework [14], originally proposed by Mehrabian and Russell. The S-O-R model asserts that environmental cues (Stimuli) trigger internal cognitive and affective states (Organism), which in turn drive behavioral outcomes (Response).

- **Stimulus (S):** In the present framework, stimuli comprise two analytically distinct categories: technology-side stimuli (MAR affordances) and consumer-side stimuli (usage motivations). The former comprise immersion, interactivity, and imagination. Immersion refers to the stimulation of sensory channels that creates a sense of presence; interactivity refers to real-time system responsiveness to user input; and imagination refers to the extent to which MAR enables mental imagery, scenario construction, and self-projection during product evaluation [15, 16]. Furthermore, the motivational drivers acting as stimuli are multidimensional, encompassing hedonic (seeking enjoyment and curiosity), normative (seeking social compliance and community connection), and gain (seeking economic benefits or better products) dimensions [17].

- **Organism (O):** This represents the internal state of the consumer, conceptualized here as the multidimensional virtual customer experience. Following Gahler et al.'s [18] comprehensive framework, the organism component is conceptualized as virtual customer experience, modeled as a higher-order multidimensional construct comprising affective, cognitive, physical, relational, sensorial, and symbolic responses.

- **Response (R):** The response component represents the behavioral outcomes that result from consumers' internal organismic states. Drawing on the S-O-R paradigm, this stage captures the consumer's observable approach or avoidance behaviors resulting from their processing of environmental stimuli [19]. Within the context of virtual retail in Vietnam, this is operationalized through two critical constructs: customer satisfaction and purchase intention. Customer satisfaction is conceptualized here not merely as a fleeting emotion, but as a cumulative, ex-post evaluation of the entire virtual journey [20,21]. It reflects the degree to which the virtual interaction—spanning cognitive, emotional, and sensorial dimensions—meets or exceeds the consumer's pre-experience expectations [22]. In virtual environments, satisfaction is often derived from the seamlessness of the app and the hedonic enjoyment of the interaction, serving as a pivotal determinant for future behavior [22, 23]. Thus, satisfaction is conceptualized as an evaluative post-experience judgment. Purchase intention is conceptualized as the consumer's downstream behavioral tendency or willingness to move toward a buying decision after the MAR experience [20, 24].

3.3. Virtual customer experience as a multidimensional higher-order construct

Table 1. Customer experience (CX) and its dimensions

Study	Definition of CX	Dimensions	Key Findings
[18]	CX is customers' subjective, goal-directed, and multidimensional mental responses to an interaction with an experience partner at a touchpoint in the customer journey.	6 dimensions: Affective, Cognitive, Physical, Relational, Sensorial, Symbolic	Developed a CX scale applicable across online, offline, and omnichannel touchpoints. Confirmed 6-dimension structure as most comprehensive for measuring psychological responses.
[8]	Omnichannel Customer Experience (OCX) is customers' evaluation of	Social communication, Value, Personalization, Customer service, Consistency,	OCX strongly impacts customer engagement, loyalty, and share of wallet.

	support, consistency, and value across retail channels.	Privacy/Safety, Returns & Delivery	
[25]	CX in AI-enabled products based on assemblage theory.	5 AI-CX dimensions: Data Capture, Classification, Delegation, Social, Anthropomorphic	Developed AI-specific CX scale integrating human-centered and object-oriented perspectives.
[26, 27]	Experience quality (EXQ) is customers' evaluation of service experience leading to behavioral outcomes.	3 dimensions (EXQ New): Brand Experience (pre-purchase), Service Experience (during purchase), Post-purchase Experience	Customers evaluate CX holistically. CX directly influences Share-of-Category (important financial metric).
[28]	CX is a multidimensional construct integrating customer responses toward retailers.	Emotional, Cognitive, Sensory, Social, Behavioral, Technological	Using fsQCA, showed no single formula leads to loyalty. Dimensions may complement or substitute each other.
[29]	CX consists of customers' spontaneous, non-deliberate responses to offering-related stimuli.	Responses to managerial stimuli; Responses to consumption processes	Proposed 4 premises of CX: (1) Spontaneous responses, (2) Range from ordinary to extraordinary, (3) Stimulus-dependent, (4) Context-specific.
[22]	CX in phygital retail (physical + digital integration).	Unidimensional overall CX influenced by antecedents (Mental Imagery, Entertainment, Aesthetics).	Mental imagery and aesthetics are key drivers of positive experience. CX leads to decision satisfaction.

In Table 1, customer experience is the internal, subjective response of customers to their interaction with a product or service. Customer experience is not limited to a single touchpoint but encompasses the entire customer journey. It can be characterized by its subjectivity and intentionality [18]. Prior literature consistently conceptualizes customer experience as a subjective and context-dependent response, yet the number and nature of dimensions vary across settings. Among the available frameworks, Gahler et al.'s [18] customer-experience framework offers the most comprehensive and transferable structure because it captures affective, cognitive, physical, relational, sensorial, and symbolic responses across different touchpoints. This six-dimensional view is particularly suitable for MAR retailing, where users not only evaluate products cognitively, but also experience sensory stimulation, embodied interaction, self-expression, and relational meaning within a technology-mediated environment. In conceptual terms, virtual customer experience is treated as a second-order reflective construct manifested through six first-order experiential dimensions.

3.4. Antecedents of customer experience

Table 2. Antecedents of customer experience in prior literature

Study	Antecedents	Key Findings	Limitations
[30]	Physical environment; Interior layout; Staff interaction; Other customers; Merchandise value; Merchandise variety	Staff interaction & merchandise value strongest drivers; CX partially mediates satisfaction/loyalty	Conducted only in Greece; No online factors
[22]	Mental imagery; Entertainment; Aesthetics	Mental imagery strongest predictor; Gender moderates effects	Small sample; Limited cultural context
[19]	Trust; Convenience; Social influence; App attributes	Convenience strongest driver; Customer support not significant	Only m-commerce; Limited emotional factors
[31]	Promotion; Product & Price; Transaction info; Access info; Order fulfilment; Customer service	Product & price integration strongest for emotional/cognitive CX	Conducted in Peru; Retail only
[32]	Social communication; Value; Personalization; Customer service; Consistency; Safety; Returns & delivery	Consistency & safety are hygiene factors; Personalization drives engagement	Need longitudinal research; Limited metaverse integration
[33]	Managerial stimuli; Social/external stimuli	CX shaped by controllable & uncontrollable factors	Lack of empirical testing
[25]	Data capture; Classification; Delegation; Anthropomorphism	Social experience & anthropomorphism drive engagement	Privacy risks; No AI type comparison

In Table 2, prior studies generally conceptualize customer experience (CX) as an internal and inherently subjective customer response that emerges during interactions with a firm and its touchpoints; however, both the specific framing of CX and its antecedents vary substantially across contexts. In brick-and-mortar retail, Chatzoglou et al. [30] show that CX is strongly shaped by employee interactions and merchandise value, and that CX partially mediates the relationship between satisfaction and loyalty; nevertheless, the evidence is limited to Greece and does not incorporate online factors. In phygital settings, Banik and Gao [22] emphasize the multidimensionality of CX, highlighting triggers such as mental imagery, entertainment, and aesthetics. In m-commerce/app environments, Shahid et al. [19] identify convenience as the most salient driver of CX, while customer support was not statistically significant; however, this approach remains limited in its treatment of affective and emotional components of experience. At a more general level, Rahman et al. [32] describe CX as an overall evaluation of cross-channel support, consistency, and value, proposing that consistency and safety function as hygiene factors, whereas personalization strengthens engagement; still, longitudinal evidence remains scarce and the metaverse/virtual domains are comparatively underexplored. From a theoretical standpoint, Becker and Jaakkola [29] interpret CX as a spontaneous organismic response to stimuli under the S-O-R framework, stressing that stimuli include both controllable and uncontrollable elements, though this argument is primarily conceptual and lacks extensive empirical validation. In AI-enabled product contexts, Wang et al. [25] show that anthropomorphism and social experience are important drivers of engagement, while also raising privacy risks and noting the need for comparisons across AI types.

The study argues that virtual customer experience is shaped not only by technological attributes but also by underlying usage motives. Specifically, the focal technological affordances comprise: (i) *immersion*, which stimulates sensory channels and enhances feelings of enclosure and presence; (ii) *interactivity*, defined as real-time system responsiveness to user inputs; and (iii) *imagination*, the extent to which the MAR interface enables mental simulation and scenario construction during product evaluation [15, 16]. In parallel, stimuli also arise from multidimensional *motivational drivers*, including *hedonic motives* (seeking enjoyment and curiosity), *normative motives* (seeking social fit and community connection), and *gain motives* (seeking economic benefits or superior products) [17]. Rather than enumerating antecedents separately by domain (e.g., store, app, channel integration), this study consolidates them into two foundational stimulus categories that are central to virtual environments: technological *affordances* (which enable experience) and *motivational drivers* (which activate purposeful use). This integrated framing is therefore better aligned with the virtualized nature of the touchpoint and provides a more context-appropriate explanation of CX in virtual environments.

This framework focuses on antecedents that are especially central to MAR as an experiential retail interface. The selected technological affordances capture the distinctive experiential capacity of MAR, while the selected motivations capture why consumers voluntarily engage with such interfaces. Other variables such as trust, ease of use, and perceived usefulness remain important but are treated as adjacent constructs that may be incorporated in future empirical extensions. They are excluded from the focal model for reasons of theoretical parsimony. More specifically, the present framework prioritizes experience-enabling and usage-activating stimuli that are most distinctive to MAR as an immersive retail interface, whereas trust and usefulness are more general technology evaluation beliefs that may be incorporated as controls or boundary conditions in future empirical work. Immersion is expected to enhance sensorial vividness and affective involvement. Interactivity is expected to strengthen cognitive engagement and perceived control during product evaluation. Imagination is expected to stimulate mental imagery, self-projection, and symbolic meaning construction. On the motivation side, hedonic motives are expected to intensify enjoyment and curiosity, normative motives are expected to strengthen relational and socially informed experience, and gain motives are expected to reinforce the utilitarian and decision-support aspects of virtual customer experience.

Proposition 1: Stronger usage motivations are expected to enhance virtual customer experience.

Proposition 2: Stronger perceived MAR technological affordances are expected to enhance virtual customer experience.

Taken together, prior studies suggest that antecedents of customer experience have been examined in fragmented ways across retail settings and technologies. The present study addresses this fragmentation by organizing antecedents into two conceptually coherent stimulus categories—technological affordances and usage motivations—which are especially relevant to MAR retail applications.

3.5. Consequences

Table 3. Consequences of customer experience in prior literature

Study	Consequences of CX	Key Findings	Gaps / Limitations
[18]	Attitude, Satisfaction, Word-of-Mouth, Loyalty	Affective, sensory, and symbolic dimensions have the strongest impact on WOM.	Cross-sectional data limits causal inference; longitudinal research is needed to examine

		• Physical dimension strongly affects loyalty. • CX explains over 80% of variance in Word-of-Mouth and satisfaction.	cumulative CX across the journey.
[33]	1. Peace of Mind 2. Customer Well-being 3. Share of Wallet 4. Influence intention	• SafeCX positively impacts customer well-being. • Well-being mediates the relationship between SafeCX and both share of wallet and influence intention.	• Need cross-cultural validation beyond the current sample. • Additional types of safety (beyond physical and data security) should be examined.
[23]	1. Customer Satisfaction 2. Word-of-Mouth 3. Customer Loyalty	• CX has both direct and indirect (via satisfaction) effects on loyalty. • Demographics (gender, age, income) do not significantly moderate the CX–loyalty relationship.	• Focused only on banking in a developing country (Zimbabwe/Namibia). • Needs validation in other service sectors.
[25]	Consumer Behavioral Engagement	• Social experience has the strongest effect on behavioral engagement	• Sample may not represent all AI users. • Moderators such as privacy concerns or technology readiness should be examined.
[22]	Satisfaction	• CX fully mediates the effects of mental imagery and aesthetics on decision satisfaction.	• Student sample limits representativeness.

Across prior customer experience research in Table 3, consequences are consistently framed as attitudinal, emotional, and behavioral outcomes that occur after consumers interact with a service or technology. The studies summarized in the table collectively show that CX is not only an immediate “feeling,” but a strong explanatory driver of downstream outcomes such as satisfaction, word-of-mouth, loyalty, engagement, and decision satisfaction. For example, Gahler et al. [18] report that CX explains a very large share of variance in WOM and satisfaction, highlighting that richer affective/sensory/symbolic experiences translate into stronger post-experience responses. CX effects can be both direct and indirect, meaning CX may influence one outcome (e.g., loyalty) through another outcome (e.g., satisfaction). Manyanga et al. [23] support this logic that CX affects loyalty directly and indirectly via customer satisfaction, reinforcing satisfaction as a key evaluative consequence that channels experience into later behavior. In newer digital contexts, Wang et al. [25] similarly highlight CX-related dimensions as powerful predictors of consumer behavioral engagement, implying that immersive/interactive experiences can push users toward deeper participation and action—an important stepping stone toward commercial behaviors. CX consequences are not limited to “classic” marketing outcomes (word-of-mouth, loyalty), but also include well-being-related and decision-quality outcomes. Reitsamer and Becker [33] and Rahman et al. [34] show that a safety-focused CX (“SafeCX”) improves customer well-being, which then influences outcomes like share of wallet and influence intention. [22] further suggests that CX can fully mediate how aesthetics/mental imagery become decision satisfaction, which fits especially well with technology-mediated experiences where visuals and imagination are central.

Virtual customer experience in this study refers to the multidimensional internal experiential state generated during MAR interaction, whereas satisfaction is treated as a post-experience evaluative judgment, and purchase intention as a downstream behavioral tendency. Accordingly, satisfaction is not conceptualized as a dimension of experience but as a consequence of it. Satisfaction is a highly appropriate CX consequence in mobile AR because

it represents the user's overall evaluative judgment after using the AR experience [19,35]. In mobile AR shopping or product-try-on contexts, users process vivid sensory cues (visual realism), emotions (excitement/fun), and functional utility (decision help) [3, 24]. Purchase intention is also relevant because mobile AR is often deployed specifically to reduce uncertainty and increase confidence in buying (e.g., visualizing fit, appearance, or use in context). Purchase intention is the most direct commercial approach response: it captures the user's likelihood or willingness to buy after the AR experience, which is especially relevant when AR is part of the purchase journey [36]. Accordingly, a more immersive, engaging, and meaningful MAR experience should increase consumers' willingness to move toward purchase [37]. This structure implies partial mediation, whereby customer satisfaction functions as a post-experience evaluative mechanism translating virtual customer experience into purchase intention.

Proposition 3: *More positive virtual customer experience is expected to lead to higher customer satisfaction.*

Proposition 4: *More positive virtual customer experience is expected to lead to stronger purchase intention.*

Proposition 5: *Higher customer satisfaction is expected to lead to stronger purchase intention.*

4. PROPOSED CONCEPTUAL FRAMEWORK

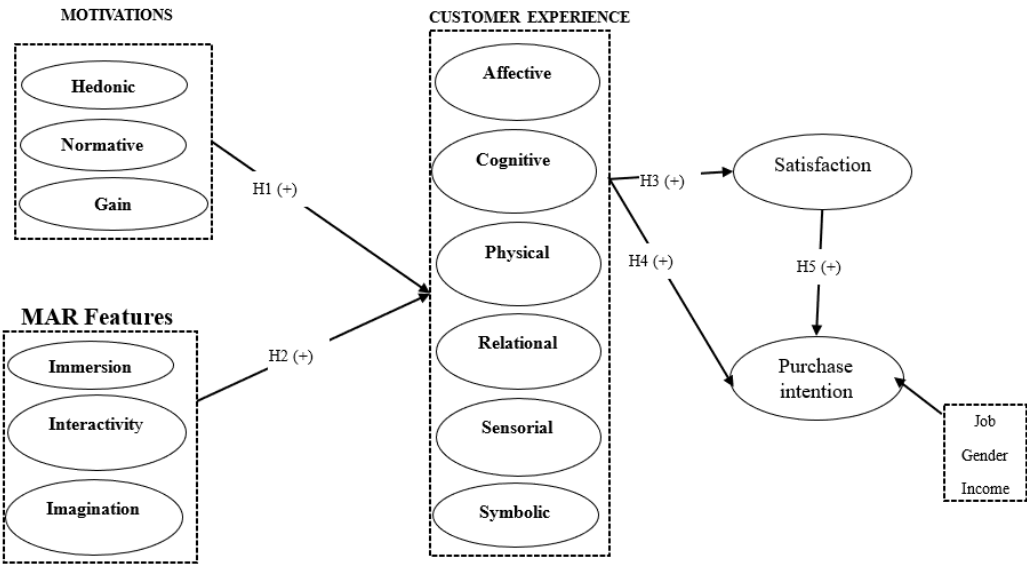


Figure 1. An integrated conceptual model of virtual customer experience

This study positions virtual customer experience not as a peripheral outcome of MAR usage, but as the central explanatory mechanism through which technology-enabled retail stimuli are translated into post-experience evaluations and behavioral intentions. In this sense, virtual customer experience is conceptualized as a higher-order multidimensional organismic state, rather than as a single affective reaction or a mere proxy for technology acceptance. On the stimulus side, two sets of drivers are specified. First, consumer motivations—hedonic, normative, and gain-oriented motives—capture why individuals engage with MAR retail applications. Second, MAR technological features—immersion, interactivity, and imagination—represent the app's experiential affordances that shape how the virtual

environment is perceived and enacted. MAR technological affordances such as immersion, interactivity, and imagination intensify sensory stimulation, user control, and mental simulation during product evaluation. These features make the virtual encounter more vivid, engaging, and personally meaningful, thereby enhancing the affective, cognitive, sensorial, and symbolic dimensions of virtual customer experience. Therefore, higher levels of perceived MAR technological affordances are expected to positively influence virtual customer experience. These stimuli jointly influence the organism component, operationalized as a multidimensional customer experience construct comprising six interrelated dimensions: affective, cognitive, physical, relational, sensorial, and symbolic experience. Conceptually, this experiential bundle reflects a higher-order representation of how customers feel, think, sense, relate, and assign meaning when interacting with MAR-enabled retail touchpoints.

Figure 1 integrates the study's conceptual logic into a parsimonious process model. Two stimulus categories—MAR technological affordances and usage motivations—jointly shape virtual customer experience, conceptualized as a higher-order multidimensional organismic state. This experiential state then drives both a direct behavioral response (purchase intention) and an indirect path through customer satisfaction, a post-experience evaluative judgment.

5. DISCUSSION AND IMPLICATIONS

This discussion highlights the theoretical significance and managerial relevance of positioning virtual customer experience as the central mechanism linking MAR-related stimuli to downstream consumer outcomes in Vietnam. By integrating S-D Logic and the S-O-R framework, the proposed model suggests that virtual customer experience emerges from the joint influence of technological affordances and usage motivations, and that this experience subsequently shapes satisfaction and purchase intention.

5.1. Theoretical contributions

This study offers three main theoretical contributions. First, it shifts immersive retail research from a primary emphasis on technology adoption and continuance toward the formation of virtual customer experience itself. In doing so, the paper treats MAR not merely as a utilitarian tool, but as an experiential service interface that shapes multidimensional internal responses. Second, the study conceptualizes virtual customer experience as a higher-order organismic mechanism within the S-O-R framework, thereby clarifying how MAR-related stimuli are translated into post-experience evaluations and behavioral intentions. Third, by situating the framework in Vietnam, the paper extends immersive retail and customer experience theory into an emerging-market context where heterogeneous technology familiarity, strong social influence, and evolving trust conditions may alter the salience of both technological and motivational stimuli.

5.2. Managerial implications for retailers

For retailers operating in Vietnam and similar emerging markets, the proposed framework suggests three managerial priorities. First, firms should prioritize MAR affordances that strengthen experiential quality, especially realism, interactivity, and ease of mental simulation. High-fidelity virtual try-on and product visualization tools may help consumers evaluate products more confidently and reduce perceived uncertainty during online purchase decisions.

Second, retailers should design MAR applications in ways that align with users' underlying motivations. Hedonic motives may be addressed through enjoyable and visually engaging interfaces, normative motives through social sharing and co-experience features, and gain motives through functions that improve decision quality, such as fit visualization, comparison support, or contextual product information [38].

Third, firms should recognize heterogeneity in consumer technology readiness. In emerging-market settings such as Vietnam, not all users will engage with MAR in the same way. Retailers may therefore benefit from offering tiered experiences, ranging from simple and intuitive AR interfaces for less experienced users to richer and more immersive options for more innovative segments [39]. Together, these strategies may improve satisfaction and strengthen purchase intention by making virtual customer experience more vivid, relevant, and accessible.

5.3. Limitations and future research

This conceptual paper has several limitations that open avenues for future empirical investigation. First, the model treats technological affordances and usage motivations as aggregated stimulus categories; future studies may therefore unpack the relative effects of each subdimension. Second, the proposed framework remains conceptual and requires empirical validation, for example through PLS-SEM or covariance-based SEM [40] with Vietnamese consumers. Third, the framework is limited to MAR retail applications; future research may compare MAR with broader virtual or metaverse-based environments to examine whether different immersive technologies generate different experiential mechanisms and commercial outcomes. Finally, subsequent studies may examine important boundary conditions such as consumer innovativeness, technology readiness, privacy concerns, and product category [34] as well as longitudinal effects such as habituation and the durability of virtual customer experience over time.

6. CONCLUSION

This study develops a conceptual framework for understanding customer experience in MAR retail applications in Vietnam. By integrating S-D Logic and the S-O-R paradigm, the paper explains how technological affordances and usage motivations may jointly shape multidimensional virtual customer experience and how such experience may influence satisfaction and purchase intention. As such, the study contributes a theory-informed foundation for future empirical research on immersive retailing in emerging-market contexts and provides a clearer conceptual basis for examining virtual try-on and related MAR-enabled customer journeys.

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