Engaging the Shopper: Exploring the Influence of Interactive Technology in Window Displays on Consumer Behavior

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ABSTRACT

In the contemporary retail landscape, integrating interactive technology within window displays has transformed traditional window shopping into a dynamic, immersive experience. The research, grounded in the Technology Acceptance Model (TAM) theoretical framework and enriched by insights from visual merchandising and experiential marketing literature, seeks to explore the nature and depth of interactive technology engagement. It aims to understand the impact of specific window display elements on consumer perceptions and investigate the influence of interactive features on consumers’ willingness to enter stores. Furthermore, it aims to uncover how interactive technology contributes to or detracts from the shopping experience. Conducted as a qualitative investigation, the study involved 23 semi-structured interviews, continuing until data saturation was achieved. The three-step thematic analysis was employed to derive rich, in-depth insights into consumers’ interactions with interactive technology in window displays. The findings illuminate diverse patterns of interactive technology engagement, shedding light on the impact of window display elements on consumer perceptions and the significant role of interactive features in influencing store entry decisions. Participants expressed varied perspectives on how interactive technology enhances the shopping experience, emphasizing the importance of user-friendly interfaces and personalized interactions. The study also uncovered distinct consumer preferences, providing valuable insights into the types of interactive features that resonate most with diverse consumer segments. This research contributes to existing knowledge by exploring the relationships between consumers and interactive technology in retail window displays. The qualitative approach offers depth and context to understanding consumer behavior, addressing gaps in the literature. The findings hold practical significance for retailers aiming to optimize the integration of interactive technology, fostering immersive and tailored shopping experiences that resonate with diverse consumer preferences. Overall, the study’s originality lies in its qualitative depth, providing a holistic perspective on the impact of interactive technology on the modern retail landscape.
INTRODUCTION

Today's retail technology affects customer experiences and purchases. Interactive technology allows companies to engage and fascinate customers across various touchpoints. This technological breakthrough relies on interactive window displays that seamlessly blend the real and digital worlds. These AR, touchscreen, and VR displays changed window shopping (Kim et al., 2023). This intriguing research analyzes how interactive window displays affect retail and customer behavior. Interactive window displays entice customers. Consumers' complicated interactions with interactive window displays are examined in this study. The goal is understanding how these elements affect perceptions, decisions, and purchases. Businesses prioritize client data with contemporary technology to stay competitive and make smart investments (Huy et al., 2023). Interactive technology influences customer engagement and retail decision-making, according to many studies. Hashim et al. (2014) found that interactive displays increased retail consumer engagement and time spent. Augmented reality influences how customers understand product information. Their research demonstrated that information accessibility and decision-making confidence can increase. There has also been more empirical research on interactive technology and visual merchandising. Lilly (2010) study on virtual displays in traditional window layouts shed light on the synergistic benefits of combining physical and digital elements. These studies explain the multiple links between retail shoppers and interactive technology. The primary focus of this study is on "Interactive Technology Engagement." This dimension measures client interactions with window installations' interactive aspects including virtual displays, touchscreens, and augmented reality. Interactive engagement enhances display interaction, which affects consumer behavior, according to (Oyelere et al., 2023). Interactive and participative technology improves brand relationships by focusing customer attention, according to Vishnubhotla et al. (2020). The variable "Window Display Perception" studies how shoppers perceive window displays, focusing on colors, arrangement, and product placement. Bist and Mehta (2023) discovered that well-designed window displays attract customers with good first impressions. The aesthetics and uniformity of window displays affect customers' first perceptions and institutional interactions. "Influence on Willingness to Enter Stores" measures how interactive window displays affect entry. Interactive components were linked to establishment support by Kalantari et al. (2022). This suggests that interactive displays, especially window shopping and retail browsing, impact customer choices. Customers rate how interactive technology improves or detracts from the shopping experience in the "Shopping Experience Enhancement" variable. Hahm et al. (2019) discovered that interactive displays enhance retail purchases. Customers want a more engaging and personalized buying experience. Therefore, more information, entertainment value, and customization are typically offered. To understand "Consumer Preferences," identify the interactive elements customers like most and examine how demographics and individual preferences impact this. Shops must analyze customer preferences to tailor interactive displays for varied populations and follow market trends. The variable "Perceived Value and Impact" measures customers' assessment of interactive window technology and whether it suits the business's mood. Yoo (2023) found that customers prefer interactive aspects depending on a business's environment. This study shows how the retail atmosphere affects product value. Szocs et al. (2023) found that interactive displays boosted brand linkages and customer engagement. The preceding findings show that interactive technology might help retailers deliver distinctive and interesting shopping experiences. They found that these displays' visual harmony and attractiveness substantially influence how individuals evaluate and enter an organization (Zhu et al., 2023). Well-designed, interactive window displays increase business visits, according to a study. Wongkitrungrueng and Assarut (2020) explored how shopping experience, perceived value, and customer preferences connect. According to this study, combining interactive technology with
customer preferences and establishing a unified retail environment may increase the perceived value of interactive displays and the shopping experience. Despite advances, this study tackles interactive technology information gaps in retail research. Previous research occasionally needs to understand the complex relationship between interactive technology, window displays, and shopping. Many studies have studied these aspects, but a complete understanding still needs to be provided. The effects of window display design and interactive technology on consumer perceptions and behavior need further study. Quantitative methods have dominated research, disregarding qualitative methods' subtle insights. Since client-technology interactions are subjective and complicated, qualitative research is essential. Our qualitative study examines participant narratives and experiences. Understanding the complexity of customer reactions to interactive shop display technology may help bridge perspectives. This study uses many theoretical frameworks and actual data to support its links. The Technology Adoption Model (TAM) implies that usability and simplicity strongly influence customers' technology adoption and utilization. The research hypothesizes that applying TAM principles to interactive displays will increase positive experiences with interactive elements, usability, and practicality perceptions. The decision to enter a shop will improve. According to Chopdar et al. (2022), the visual appeal and homogeneity of window displays attract and influence customers. The study predicts that combining a well-designed window display with interactive elements will boost positive perceptions and increase consumers' likelihood of entering the business. The study examines complicated customer-interactive technology relationships in store window displays. The major aim is to understand how interactive components affect customer behavior, perceptions, and buying experiences. To identify patterns and variations, the study examines customer involvement with touchscreens, virtual displays, and augmented reality in storefront displays. This study seeks to understand how customers actively use technology. The study also examines how window display components affect consumers' opinions. Window display colors, layout, and product positioning will be assessed to establish their influence on shoppers' impressions. This study examines how visual and ornamental elements affect consumer impressions. This study's findings can help stores improve their window displays using interactive technology. Understanding how design elements and interactive features impact consumer perceptions, preferences, and purchase intents may help businesses develop appealing and immersive retail experiences. To design interactive displays that appeal to diverse groups and follow market trends, corporations study customer preferences and perceived value. Understanding what makes a buying experience better helps organizations strategically position themselves in the competitive market, increasing brand advocacy and consumer loyalty.

LITERATURE REVIEW

In recent years, marketing and retail specialists studied customer behavior and technological convergence. The academic study examines the intricate linkages between interactive technology and retail customer interaction. Wang et al. (2023) examined how interactive displays affect shopping. Storefront displays using touchscreens, virtual displays, and augmented reality have been studied to engage customers. These studies illuminate the evolving retail market, where technology drives interest and customer-company connections (Pizzi et al., 2020; Sissing et al., 2017). Studies have examined window display perceptions, including what constitutes good views and how they impact consumer behavior. Interactive technology may also affect customers' support of physical stores, according to research. Positive interactive window displays affect business visits (Li et al., 2023).

Interactive technology engagement

Interactive technologies have changed retail consumer engagement. Customer contact with interactive technology is dynamic and crucial in retail, according to research. Window displays now include touchscreens, virtual displays, and augmented reality to engage consumers. Harmandaoğlu Baz et al. (2018), demonstrated that these displays can draw attention and influence retail interactions. Researchers are progressively studying how touchscreens, virtual displays, and augmented
realism affect customer behaviour and engagement across interactive components. The most appealing characteristics of these gadgets and human interaction patterns are the focus of this research. Beyond interactive displays, consumer involvement explores window presentation perception concerns. Customer preferences for window displays are examined by (Al Ahmadi, 2017; Iluyemi et al., 2022). A comprehensive study reveals how colors, layout, and product placement affect display impressions. This study investigates whether favourable remarks are linked to a topic or whether individual attributes influence customer perception. By analyzing the complicated interaction between window display design features and customer perceptions, scientists may learn about the visual and aesthetic traits that make interactive technology more engaging and interactive. Window displays depend on interactive technology's impact on store visitors.

**Window display perception**

Retail window display perception examines viewer response to store images. According to scholars, window displays should contain colors, design, and product positioning. Lilly (2010) stresses customer attitudes by studying numerous elements. Understanding how design elements impact perception helps merchants pick visual messages that resonate with their consumers. Window colors affect buyers. Color psychology studies how colors impact client moods and product perceptions. Elmashhara and Soares (2022) use window display color selections to exemplify this strategy. Cooler hues relax, and warmer ones invigorate. Organizations may use color palettes to build visually attractive displays that evoke desired emotions by understanding how colour affects customer perception. Exhibition design may affect client perception. Spatial layout may draw attention and affect value. Researchers examine how layout affects display coherence and if polish is desirable. Udokwu et al. (2023) improve this research by analyzing how window display product placement affects client impressions. A well-organized display may draw attention, highlight important products, and tell a brand-appropriate story. Product placement in the storefront showcases client focus. Products at eye level are more noticeable, and arrangement can convey information or rank. Visual merchandising includes understanding how customers perceive spatial patterns.

**Influence on willingness to enter stores**

Interactive store displays impact customers' corporate visits, according to modern retail research. Academics have examined how favorable interactive experiences promote long-term shop visits. Straubinger et al. (2023) improved this academic field by understanding retail consumer decisions and behaviors. Interactive aspects that make customers happy affect shop visits. Shin and Lee (2021) explored how interactive displays' novelty attracts buyers. Touchscreens and augmented reality draw people to their immersive experiences. Positive research participation improves business visits. This temptation comes from wanting to use the window's items or experiences. Customer choices also affect business visits and pleasant interactive experiences. Ghouri et al. (2021) examine how customers' preferences, inclinations, and dispositions affect their responsiveness to interactive window technologies. Individuals may choose interactive aspects that meet their information accessibility, entertainment value, or tailored interaction requirements. How well interactive features match personal tastes affects decision-making and the likelihood of switching from online browsing to in-person exploration. Interactive technology greatly influences consumer loyalty.

**Shopping experience enhancement**

Modern retail research focuses on how interactive technology enhances purchasing. Cai and Mardani (2023) have examined customer perspectives to determine how interactive elements improve the shopping experience. The study addresses information availability, amusement, and customization. This phrase illustrates the delicate interplay between technology and retail consumer emotions. Interactive technologies improve the purchasing experience by improving information access. Tarafdar et al. (2024) examine how technology makes product information more accessible, helping buyers make better judgments. Interactive displays like touchscreens and virtual product showcases provide detailed features, specifications, and use cases. The abundance of information allows clients to make informed buying decisions, boosting their satisfaction and confidence. Shopping and pleasure
are tremendously enhanced by interactive technology. Imtiyaz et al. (2022) recommend adding interactive components to make shopping fun. Augmented reality and interactive displays make shopping entertaining and lively. Consumers are not just making purchases; they are embarking on an immersive and engaging journey that creates good feelings and memorable experiences, boosting the overall satisfaction of shopping.

**Consumer preferences**
The strongest consumer connections and demographic-technological overlaps have been thoroughly examined. Retailers utilize interactive technology based on consumer preferences. To determine which interactive traits customers enjoy, Xi and Hamari (2021) researched touchscreens, virtual displays, and augmented reality. Individual interests vary, highlighting the necessity to build interactive displays for varied customer segments. Age, gender, and technical ability affect interactive customer decisions. Younger consumers may favor augmented reality, whereas older consumers may choose simpler interactive displays. Retailers may enhance products by analyzing demographic differences and customizing interactive items for specific target demographics. Academic research investigates market trends, customer preferences, and subgroups. Shah et al. (2023) study if consumer preferences drive interactive feature adoption with firm advancements. This study helps companies adjust interactive technology products to changing customer expectations. A customer preferences study entails identifying desirable interaction features and how they affect purchases.

**Perceived value and impact**
Jiang et al. (2021) examined the complex relationship between perceived value, store setting, and buying experience of interactive features. Interactive technology values perceived value over usefulness. Mohamad et al. (2019) argue that customers' perception of interactive features relies on the advantages of adopting these technologies. Access to information, entertainment, and customization may improve. Understanding how customers value these characteristics influences their perception of interactive displays and their desire to utilize the technology. Interactive technology’s influence on retail value matters. Interactive factors impact retail shop atmosphere, according to (Jam et al., 2018; Wang et al., 2023). Dynamic graphics, changeable displays, and cutting-edge technology can make a space look current. The influence extends beyond interactive features to the shop’s atmosphere, vitality, and modernity. Consumers' store environment ratings affect the value of interactive displays and their shopping experience. Interactive tech boosts buying value. Li et al. (2023) study shoppers’ perceptions of interaction components' effects. More excellent knowledge, faster decision-making, and greater enjoyment are sought from these technologies. A better buying experience can improve consumer satisfaction and interactive display opinion. Interactive technology impacts clients differently. Chiu and Cho (2021) examine whether demographics or preferences matter. Understanding these trends may help merchants customize interactive displays for specific audiences.

**METHODOLOGY**
Participants in this qualitative study were people who had recently employed interactive technology in Chinese retail window displays. To represent different demographic groups and investigate shopping behaviours, a purposeful selection technique was used to select 23 participants (Table 1) carefully. The sample was diverse in age, gender, and consumer behavior. Recruiting took place at famous shopping areas, malls, and centers. The goal was to gather diverse perspectives from people who often interact with retail technology, as well as casual customers and those with experience in various retail contexts. Before semi-structured interviews, the research team explained the study's aims to possible volunteers in a candid manner. After that, informed consent was given. Those who recently used technology-enhanced window displays were chosen. This guaranteed that the study focused on experts on the issue. The researchers considered technological literacy, age, and gender to ensure a balanced sample. The varying backgrounds of the participants helped explain how interactive window displays attracted different customer groups.
Table 1: Demographic profile of respondents

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Shopping Frequency</th>
<th>Technological Familiarity</th>
<th>Retail Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>28</td>
<td>Female</td>
<td>Regular</td>
<td>Moderate</td>
<td>Mall</td>
</tr>
<tr>
<td>P2</td>
<td>45</td>
<td>Male</td>
<td>Occasional</td>
<td>High</td>
<td>High Street Store</td>
</tr>
<tr>
<td>P3</td>
<td>35</td>
<td>Female</td>
<td>Frequent</td>
<td>Low</td>
<td>Shopping District</td>
</tr>
<tr>
<td>P4</td>
<td>22</td>
<td>Male</td>
<td>Regular</td>
<td>High</td>
<td>Department Store</td>
</tr>
<tr>
<td>P5</td>
<td>40</td>
<td>Female</td>
<td>Occasional</td>
<td>Moderate</td>
<td>Boutique</td>
</tr>
<tr>
<td>P6</td>
<td>55</td>
<td>Male</td>
<td>Frequent</td>
<td>Low</td>
<td>Mall</td>
</tr>
<tr>
<td>P7</td>
<td>30</td>
<td>Female</td>
<td>Regular</td>
<td>High</td>
<td>High Street Store</td>
</tr>
<tr>
<td>P8</td>
<td>27</td>
<td>Female</td>
<td>Frequent</td>
<td>Moderate</td>
<td>Shopping District</td>
</tr>
<tr>
<td>P9</td>
<td>38</td>
<td>Male</td>
<td>Frequent</td>
<td>Low</td>
<td>Department Store</td>
</tr>
<tr>
<td>P10</td>
<td>32</td>
<td>Female</td>
<td>Regular</td>
<td>High</td>
<td>Boutique</td>
</tr>
<tr>
<td>P11</td>
<td>48</td>
<td>Male</td>
<td>Occasional</td>
<td>Moderate</td>
<td>Mall</td>
</tr>
<tr>
<td>P12</td>
<td>25</td>
<td>Female</td>
<td>Frequent</td>
<td>Low</td>
<td>High Street Store</td>
</tr>
<tr>
<td>P13</td>
<td>41</td>
<td>Female</td>
<td>Regular</td>
<td>High</td>
<td>Shopping District</td>
</tr>
<tr>
<td>P14</td>
<td>29</td>
<td>Male</td>
<td>Occasional</td>
<td>Moderate</td>
<td>Department Store</td>
</tr>
<tr>
<td>P15</td>
<td>33</td>
<td>Female</td>
<td>Frequent</td>
<td>Low</td>
<td>Boutique</td>
</tr>
<tr>
<td>P16</td>
<td>50</td>
<td>Male</td>
<td>Regular</td>
<td>High</td>
<td>Mall</td>
</tr>
<tr>
<td>P17</td>
<td>26</td>
<td>Female</td>
<td>Occasional</td>
<td>Moderate</td>
<td>High Street Store</td>
</tr>
<tr>
<td>P18</td>
<td>37</td>
<td>Male</td>
<td>Frequent</td>
<td>Low</td>
<td>Shopping District</td>
</tr>
<tr>
<td>P19</td>
<td>34</td>
<td>Male</td>
<td>Regular</td>
<td>High</td>
<td>Department Store</td>
</tr>
<tr>
<td>P20</td>
<td>31</td>
<td>Female</td>
<td>Occasional</td>
<td>Moderate</td>
<td>Boutique</td>
</tr>
<tr>
<td>P21</td>
<td>47</td>
<td>Male</td>
<td>Frequent</td>
<td>Low</td>
<td>Mall</td>
</tr>
<tr>
<td>P22</td>
<td>24</td>
<td>Female</td>
<td>Regular</td>
<td>High</td>
<td>High Street Store</td>
</tr>
<tr>
<td>P23</td>
<td>36</td>
<td>Male</td>
<td>Occasional</td>
<td>Moderate</td>
<td>Shopping District</td>
</tr>
</tbody>
</table>

The qualitative study collected data through semi-structured interviews (Table 2). This adaptable strategy focused on researching participants' experiences with shop window display interactive technology. Each interview was conducted face-to-face to build rapport and understand participants' opinions. The semi-structured interviews included participants’ perspectives on interactive displays, feature preferences, and how these factors affected their purchasing decisions and retail experience. Probing and follow-up questions to get detailed responses. Audio interviews were conducted with participants’ consent to portray their perspectives correctly. Based on the complexity and breadth of the participants' responses, the interviews lasted 45–60 minutes. Longer lengths were advised to examine participants' experiences and provide deeper insights. Qualitative research requires data saturation, which was carefully maintained during data collection. Since no fresh subjects or insights emerged after 23 interviews, saturation was reached. By stopping data collection, the research understood the phenomena being studied, preventing recurrence. Field notes were taken during and after each interview to record contextual information, nonverbal cues, and discussion tone.

Table 2: Interview guidelines

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Technology Usage</td>
<td>1. Can you describe your recent experiences with interactive technology in window displays?</td>
</tr>
<tr>
<td></td>
<td>2. How frequently do you engage with interactive features in retail settings?</td>
</tr>
<tr>
<td></td>
<td>3. What specific interactive features or technologies have you encountered recently?</td>
</tr>
<tr>
<td>Window Display Perception</td>
<td>1. How would you describe your overall perception of window displays in retail environments?</td>
</tr>
<tr>
<td></td>
<td>2. What elements within a window display catch your attention and leave a positive impression?</td>
</tr>
</tbody>
</table>
Cont....

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willingness to Enter Stores</td>
<td>1. In your opinion, does the presence of interactive technology in window displays influence your decision to enter a store?</td>
</tr>
<tr>
<td></td>
<td>2. Can you recall a specific instance where an interactive display motivated you to enter a store?</td>
</tr>
<tr>
<td></td>
<td>3. Are there any factors that mediate or moderate the relationship between engagement with interactive displays and store entry?</td>
</tr>
<tr>
<td>Shopping Experience Enhancement</td>
<td>1. How do you perceive interactive technology contributing to your overall shopping experience?</td>
</tr>
<tr>
<td></td>
<td>2. Do you find that interactive features enhance information access, entertainment value, or personalization during your shopping journey?</td>
</tr>
<tr>
<td></td>
<td>3. How does the overall retail environment influence your perspective on the contribution of interactive technology to the shopping experience?</td>
</tr>
<tr>
<td>Consumer Preferences</td>
<td>1. Are there specific interactive features that resonate more with you compared to others?</td>
</tr>
<tr>
<td></td>
<td>2. How do your demographic factors, such as age and gender, influence your preferences for interactive elements?</td>
</tr>
<tr>
<td></td>
<td>3. Do you notice an alignment between your preferences and current market trends in interactive technology in retail?</td>
</tr>
<tr>
<td>Perceived Value and Impact</td>
<td>1. How do you assign value to the interactive technology in window displays?</td>
</tr>
<tr>
<td></td>
<td>2. Can you describe how interactive displays impact the overall atmosphere of a store?</td>
</tr>
<tr>
<td></td>
<td>3. In your opinion, does the impact of interactive technology vary across different segments of consumers?</td>
</tr>
</tbody>
</table>

Braun and Clarke (2006) three-step theme analysis was used to analyze this study (Table 3) extensively. To fully comprehend the subject, the study team carefully analyzed transcripts. This iterative process yielded the first codes that captured the participants' replies' key meanings. The researchers then used open code to systematize data point identification. Using continuous comparison, codes were changed and improved based on new insights. The study team reached an agreement after long discussions, improving intercoder reliability. Codes had to be organized into cohesive chunks that appropriately reflected data issues to build themes. These topics were refined through iterative investigation and debate to meet study questions and objectives. Continuously comparing data inside and between interviews increased the analysis and comprehension of the dataset.

**Table 3: Stages of thematic analysis**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Data Familiarization</td>
<td>In this initial phase, researchers immersed themselves in the collected data, which comprised transcripts of in-depth interviews with participants.</td>
</tr>
</tbody>
</table>
Engaging the Shopper: Exploring the Influence of Interactive Technology

### Stage 1: Data Familiarization

**Objective:** Gain a deep understanding of the content and identify recurring patterns, key concepts, and potential themes within the data.

**Activities:** Systematically review transcripts, take notes on key concepts, and immerse in the data to identify initial codes that capture core meanings.

**Outcome:** A thorough familiarity with the dataset and initial identification of potential codes and patterns.

### Stage 2: Code Generation

Building upon the familiarization stage, this phase involved the systematic generation of initial codes representing key concepts within the data.

**Objective:** Assign codes to specific segments of data, capturing the essence of participants’ responses and experiences.

**Activities:** Engage in open coding, systematically labeling each piece of data with a code. Refine and adjust codes through constant comparison.

**Outcome:** A comprehensive set of initial codes that encapsulate the core meanings and concepts present in the data.

### Stage 3: Theme Development

This final stage focused on the organization and synthesis of codes into overarching themes that represent broader concepts and patterns within the data.

**Objective:** Group codes into coherent clusters, develop potential themes, and refine them to create a meaningful representation of the data.

**Activities:** Organize codes into potential themes based on shared patterns and meanings. Engage in iterative review and discussion to refine themes.

**Outcome:** A set of well-defined and meaningful themes that represent the key findings and insights derived from the data.

### RESULTS

Customer response toward interactive technology in store window displays is shown in many distinct interviews. The results show that complex interactions between various factors impact all participants' emotions and decisions. Interactive technology affects shop visits, compelling window displays, and store atmosphere, revealing trends that help us understand the ever-changing retail technology landscape and customer engagement. The studies underline how technology affects customers' perceptions. Given participants' experiences and subjective impressions, these findings can help firms adapt to interactive technology's ever-changing reality to improve user experience. Each study illuminates the complex customer-shop connection.

**Interactive technology influencing willingness to enter store**

Participants’ responses to the study on interactive technology and entrepreneurial aptitude were intriguing. The interviews revealed that interactive technology in window displays strongly influences people's propensity to visit an institution. The diverse demographics and buying habits of the participants corroborated this topic, as shown in Figure 1. Participant 6, a 55-year-old male, said interactive displays' appeal and inventiveness inspired him to start a business. He said, "I am instantly captivated by any interactive display located outside a store." This language intrigues me and teases what happens within. Participant 12, a 25-year-old female, agreed that interactive displays distinguish the business. The immediate experience after leaving the storefront is more important than the purchase. Participants also associated interactive aspects with a higher likelihood of visiting a store. The 37-year-old male participant said, "I feel a stronger sense of connection to the company when I can engage with the items on display." Participating would allow me to examine their services. Participant 14, a 29-year-old male, agreed, saying, "The incorporation of interactivity in the display creates the perception that the company is embracing current trends."
material may be engaging. Lilly (2010) examined how interactive displays affect customer involvement and interest, validating these qualitative findings. They stressed how these features create a dynamic and engaging shopping experience. Sung et al. (2021) also stressed retail technology advancement. Interactive displays connect the real and digital worlds, engaging consumers and influencing store visits, they say. Multiple respondents said perceived novelty mediates interactive displays and shop admission. Participant 10, a 32-year-old female, stressed the importance of grabbing her attention. Stores with interesting and vivid displays attract me. Shin and Lee (2021) found that novelty and innovation influence retail customer behavior. However, few interviewers stressed the necessity of interactive exhibitions that match the organization's philosophy or brand identity.

![Figure 1: Interactive technology influencing willingness to enter store](image)

**Engagement with window display effect the relationship between interactive technology and willingness to enter store**

Participants provided nuanced insights about the relationship between window display engagement, interactive technology, and business venture probability. In interviews, a clear pattern emerged: window display engagement directly affects how interactive technology affects business support as shown in Figure 2. Responders consistently mentioned the dynamic interaction between the beautiful window display and the interactive features. Engaging window displays boosts interactive technology, according to 27-year-old female participant 8. "I am more inclined to be actively involved when presented with a visually appealing display." Thus, the interactive feature encourages further study. Participant 13, a 41-year-old female, said the window must first attract their attention. Interesting and enjoyable interactive components enhance an experience. When the window display did not attract consumers, interactive technology had less of an impact on their decision to enter a business. Participant 19, a 34-year-old male, said that even if the window is boring, interactive aspects won’t make him enter. Experience must be visual only. Participant 4, a 22-year-old male, suggested using the interactive component to improve window information. Lack of connection diminishes my chances of getting to the door. Chopdar et al. (2022) state that visual appeal is crucial to retail consumer attraction, supporting their qualitative findings. Ng et al. (2022) emphasize the need to seamlessly integrate interactive technology and window display aesthetics to maximize client behavior. Participants often regarded the interactive elements as improving their window display engagement, creating a mutually beneficial relationship.

![Figure 2: Effect of engagement with window display](image)

**Perceived store atmosphere effect on the relationship between interactive technology and willingness to enter store**

Participants’ findings in the study on how a business’s perceived atmosphere affects interactive technology and consumers’ willingness to enter a store were noteworthy as shown in Figure 3. In interviews, respondents repeatedly stressed the importance
of the shop’s atmosphere, which is influenced by interactive technology and contextual factors, in their decision-making. Participant 5, a 40-year-old female, stressed the necessity of a good store atmosphere for interactive technology. Interactive displays provide a unique environment that is critical to the business, she said. Casual, modern settings make me more likely to come. Participant 17, a 26-year-old female, said the interactive elements should boost the business’s atmosphere. The whole experience—not just appearances—is crucial. Participants also noted that a mismatch between interactive technology and store atmosphere diminished their desire to come. Participant 9, a 38-year-old male, believes that a fancy business’s interactive section may look frivolous or unimportant. "The atmosphere should align with the image they are portraying." Participant 22, a 24-year-old female, stresses the necessity of matching interactive features to the corporate identity and company culture. Bruckberger et al. (2023) found that store atmosphere strongly affects consumer perceptions and actions. This supports qualitative findings. To establish a positive retail atmosphere, Krasonikolakis et al. (2022) recommend uniformity between interactive elements and the shop mood. Interactive technology improved the store’s attractiveness and atmosphere, according to some attendees. Participant 14, a 29-year-old man, says the company’s interactive displays enhance the buying experience. "It introduces a unique element that revitalizes the environment."

Consumer technology experience effect on the relationship between interactive technology and willingness to enter store

The participants’ ideas on how technological experience affects interactive technology and store visiting propensity were beneficial. The interviews showed that participants’ past technological experiences shaped their perceptions and interactions with interactive displays and influenced their desire to work in this field. Shop display technological expertise was stressed by 30-year-old Participant 7: "I am particularly fascinated by interactive elements that are user-friendly and instinctive." My IT skills make the store more appealing. A 50-year-old male, participant 16, said, "As someone skilled in technology, I value interactive elements that are executed with expertise." It makes me want to explore the store and trust the brand. Participants often described how a mismatch between interactive elements and their technological abilities lowered their hesitance to support a firm. Participant 1, a 28-year-old female, said complicated or broken interactive technology might deter individuals. I want a perfect experience, so I can skip difficult work. Participant 18, a 37-year-old male, said technology should be comfortable. Outdated or complicated things generate barriers. Irfan et al. (2022) found that customers’ technical literacy greatly affected their interactions with technology-enhanced retail environments, supporting the qualitative findings. Wu and Dong (2023) also stressed the need to align interactive technology to consumers' technical preferences to boost engagement and happiness. Participants consistently saw a positive correlation between technological ability and interactive display value. Participant 14, a 29-year-old man, said technologically advanced or distinctive interactive aspects enhance his experience. I find it more appealing and visit the place. Participant 20, a 31-year-old female, said the technology should enhance her experience. Its
in significance won’t affect my decision to visit the establishment.
In contrast, few people said that their expectations of
the technology did not match the interactive aspects, decreasing perceived value.

![Figure 4: Effect of consumer technology experience](image)

**DISCUSSION**

The discussion chapter’s comprehensive assessment of the study's findings and scholarly literature shows customer behavior's intricacy regarding storefront displays' interactive technology. Like Sestino (2024), interactive technology impacts retail shop visits. According to analysis, interacting components interact actively. Interactive exhibits increase customer attention and shopping pleasure, the study found. In a recent study on the relevance of a dynamic and engaging retail atmosphere Basu et al. (2022), participants wrote that interactive features' newness and perceived value influence their judgments. Window displays' effects on interactive technologies and business help may expose customer behavior. The findings support Kalantari et al. (2022), who found aesthetic appeal, technical coherence, and visual element coherence influence customer behavior. According to participants' testimonies, a well-rounded and visually appealing window display and interactive elements affect store entry decisions. This confirms a recent retail integration study to increase consumer engagement (Aslam, 2023). Research on how a business’s perceived atmosphere influences interactive technology and shop visits adds to consumer behavior data. This study supports Lazaris et al. (2022) result on how shop environments affect consumer behavior and perceptions. Participants stress the importance of a good atmosphere and interactive displays that seamlessly merge into the shop space. This supports earlier studies indicating a coherent and stable store environment affects consumer experiences. The qualitative study also shows how digital encounters affect customers' attitudes and decisions. The participants shared (Anderson and Laverie, 2022) worries about customers' technological proficiency in technology-enhanced retail contexts. Consumer technological skills and simplicity of use are consistently viewed as essential factors in boosting interactive display value, according to a study. The literature underlines the necessity for merchants to match their technical items to consumers' growing technology requirements. These findings when combined with the rest of the research show how numerous factors impact customer behavior concerning interactive technologies in window displays. The participants' narratives contextualize theoretical frameworks and give specific insights by illustrating the intricate intricacy of consumer decision-making. The study shows that stores should integrate interactive technologies methodically. This integration should be seen as a comprehensive orchestration that considers visual appeal, corporate climate, and consumer technology. Not a single event. The discourse chapter provides a cohesive narrative to add to consumer behavior knowledge in the age of interactive retail technology. This is done by linking literature with research. The study confirms earlier studies and sheds light on the intricate relationship between interactive technology and consumer decision-making. This chapter examines the ever-changing retail environment, pushing scholars and professionals to analyze the consumer-store interaction. As a culmination, the study's insights give rise to several propositions that
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encapsulate the core relationships observed. These propositions serve as theoretical building blocks for future research and practical implications for retailers seeking to optimize the impact of interactive technology in window displays (Figure 5).

**P1:** Interactive technology influences the willingness of customers to enter the store.

**P2:** Engagement with window display mediates the relationship between interactive technology and the willingness of customers to enter the store.

**P3:** Perceived store atmosphere mediates the relationship between interactive technology and the willingness of customers to enter the store.

**P4:** Customer technology experience moderates the relationship between interactive technology and the willingness of customers to enter the store.

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**Figure 5: Proposed conceptual framework**

**CONCLUSION**

Finally, this study examines the complicated dynamics of client behavior in store window displays using interactive technology, which is continually changing. Mixing concepts from participant testimonials and new research articles helps understand complex linkages in operation. Assessing how interactive technology affects customer entry into a firm emphasizes the need for efficient interaction. Interactive elements increase consumers' likelihood of browsing the connected shop. It's commonly believed that positive technological experiences impact consumers' choices and behaviors. The research suggests that an interactive environment that gets consumers involved and focused may generate an engaging and immersive feel. Visual appeal and consistency, as well as window display engagement, mediate the relationship between interactive technology and company entry. Interactive components in a visually appealing and fascinating window display are known to influence consumers' brand loyalty. This supports prior studies on how to use technology and visuals in retail to engage customers. The study's investigation of how shop environment affects interactive technology entry underlines the importance of a pleasant ambiance. Consumers like companies with interactive aspects that blend into the store environment and create a good, united feel. This emphasizes the importance of store atmosphere in improving interactive technologies. Consumers' digital interactions shape their perceptions and decisions.

**Implications**

**Practical implications:** The findings may motivate retailers to add interactive technology to window displays to boost sales. The study's focus on aesthetics is reflected in merchants' practical window display selections. This data may help merchants attract customers and streamline purchases. Businesses should consider interactive technology, consumer interaction with window displays, and retail environment, according to the study's detailed methodology. Knowledge may help retailers improve shopping experiences. Customers' tech experiences may also be used to tailor interactive displays for various tech capabilities, improving engagement and inclusivity. These practical consequences can help retailers enhance interactive element interface design and provide unique customer experiences. Customized shopping experiences with interactive tech may help stores compete. The practical consequences aid retailers in the ever-changing retail IT ecosystem. They provide ways to boost client satisfaction and memorable transactions.

**Theoretical implications:** This study expands and improves consumer behavior frameworks for interactive retail window displays. This research analyzes complicated interrelationships between aspects to understand retail consumers' technology use better. Positive interaction as a critical predictor of customer visitation increases consumer participation and decision-making models. Window display engagement as a mediating element emphasizes the relationship between visual appeal and technical characteristics, expanding theoretical frameworks on their integration in retail contexts. This

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Hu et al. argument shows how shop atmosphere influences interactive technology in retail situations. This study examines how user-friendliness and technological expertise affect interactive display value, improving consumer technology experience understanding. This underlines the necessity to tailor technology to individuals. This approach gives researchers a complicated framework for investigating retail consumer-technology interactions.

**Limitations and future direction**

**Limitations**: This study adds additional customer behavior data in interactive store window displays. However, various limitations may reduce the findings’ usefulness. Qualitative approaches initially provide rich and specific insights but also limit generalizations. Participants were recruited from a specific geographic and demographic location, which may limit the applicability of the findings to other retail contexts or populations. Interactive technology users were the study’s primary emphasis. This may have caused selection bias that ignored clients who needed to be more familiar with the technology. The results may not reflect the opinions of conventional buyers or interactive display detractors. Dynamic technical discoveries and customer choices limit time. The poll results may not reflect consumer attitudes and behavior over time. Fast technological advancement may change the importance of some interrelated features, impacting the dynamics explored in the research. Longitudinal studies of retail customers’ responses to interactive technology are needed. The research relied mainly on self-reported data, which might introduce social desirability bias. People may have replied socially acceptable rather than their genuine feelings. Regarding subjective experiences and preferences, this bias might affect findings accuracy. Self-report data combined with objective measurements or observational methods may improve future research.

**Future direction**: This investigation may reveal more exciting areas that assist us in comprehending the intricate relationship between interactive technology and retail clients. For more relevant findings, sample more people from varied demographics, cultures, and locales. Studying consumer preferences and activities in different situations may help us understand how interactive displays impact the environment. Temporal restrictions are overcome via longitudinal research. Track consumer behavior to ensure interactive retail displays’ longevity. This strategy helps track client expectations and technology. Future research should incorporate qualitative and quantitative data. Use in-store behavior analysis or eye-tracking to study interactive display consumer interactions. Subjective experiences and behavioral habits may boost understanding. Further research is needed on how consumer attributes affect interactive technology reactions.

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