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REDEFINING SPACES: THE IMPACT OF IMMERSIVE TECHNOLOGIES ON THE RETAIL EXPERIENCE

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ABSTRACT

This thesis is aimed at examining the growing impact of innovative technologies, particularly augmented reality (AR), on the retail experience and the emotional dynamics of consumers in the luxury market context. At the heart of this research is the question "How does the integration of augmented reality technology in retail environments impact consumers' emotional responses, consequently influencing future purchase behavior, word of mouth, and brand loyalty in the retail sector?".

The investigation begins with an in-depth analysis of customer experience (CX), starting from the traditional 5A Model (Kotler P., Kartajaya H., Setiawan I., 2017) and advancing to the more modern concept of the customer journey, highlighting the path that the customer takes through both physical and digital interactions, and emphasizing the need for an integrated and seamless experience.

The analysis delves into the various dimensions of customer experience, including sensory, emotional, and cognitive aspects, with particular emphasis on the emotions generated by consumers' interactions with various internal and external factors, such as people, institutions, and cultural phenomena. These interactions can significantly influence behaviors and attitudes before and after purchase. This study then transitions to explore the retail experience and the emotional dynamics of consumers in the luxury market context, particularly focusing on the integration of Augmented Reality.

The decision to focus the research on customer experience is motivated by the belief that it represents a fascinating and still relatively unexplored element in marketing, as highlighted by Steve Jobs: "You've got to start with the customer experience and work backwards to the technology. You can't start with the technology and try to figure out where you're going to try to sell it." Jobs, S. (1997).

Moving forward, the work explores how augmented reality has been integrated into retail environments, showing how this technology is becoming increasingly relevant not only in the business context but also in society at large. It is also highlighted that by 2024, the use of augmented reality is expected to double compared to other technologies, signaling a significant transformation in consumer behavior and business strategies (*DataProt*, 2024; *Nsflow*, 2024)

Finally, the document examines the implementation of AR in WeChat mini-programs, demonstrating how brands are adopting omnichannel strategies to create a holistic and boundless retail experience.

The choice to include the analysis of WeChat is aimed at giving the study a contemporary perspective and showing how advanced digital platforms are transforming the retail landscape. The use of WeChat, one of the most popular messaging apps in China, illustrates how immersive technologies can be integrated into consumers' daily interactions, offering a practical and current example of how brands can innovate and enhance the customer experience.

Through this study, the growing importance of immersive technologies in enriching and personalizing the retail experience is emphasized, promoting a deeper and more meaningful engagement of the consumer.

CHAPTER 1: THE INTERCONNECTION BETWEEN RETAIL AND CUSTOMER EXPERIENCE

1.1 Understanding Retail

The term "Retail" is used to indicate the sale of goods or articles individually or in small quantities directly to the consumer (Market Business News, 2024). Its origin is French ("retaillier" in Old French means "to cut" or "to reduce"), more precisely indicating retail sales. From this expression, one can deduce the difference between this mode of commerce and wholesale. The latter presupposes the sale from one company to another (B2B) as in the case of selling large quantities of goods from manufacturers to wholesalers, who in turn sell them to retailers (such as department stores in the fashion industry); the goods they purchase in large quantities are then sold (in smaller quantities) to end customers. This last step is carried out by retailers. Often they carry out commercial activities exclusively within the B2C sphere (i.e., towards the end consumer) or sell both at retail and wholesale (think, for example, of a fashion brand like Versace, which, despite having several retail outlets worldwide, also supplies its products to different department stores and other fashion retailers, Versace Marketing Strategy, 2024)

1.1.1 The Evolution of Retail: From Version 1.0 to 4.0

1900 - Retail 1.0:

At the beginning of the 20th century, alongside specialized shops and multiproduct stores, new concepts emerged in the shopping world. These new initiatives adopted self-service systems, allowing customers to choose products independently and then pay for them at the checkout (Stax Payments, 2023; Openbravo, 2023)

One of the pioneers of this concept was Clarence Saunders, a former retail clerk and salesman. In 1916, in Memphis (Tennessee), Saunders proposed to Piggy Wiggly, a distributor, to create a new type of store. This outlet would have open shelves, strategically arranged to guide customers along an ideal path. The real innovation was allowing customers to serve themselves, without the assistance of clerks, with each

product equipped with a price tag. This concept of the supermarket was highly successful, so much so that Piggy Wiggly patented it in 1917. By 1932, in the United States, 2500 outlets followed this model. Analysts consider this the first example of modern distribution: Piggy Wiggly can be considered the first true concept store in history.

1960 - Retail 2.0

Retail 2.0 represents a revolutionary shift in the retail sector, characterized by innovative space utilization and advanced process management. This model introduced key concepts such as space optimization and process efficiency, transforming how retailers operate and interact with consumers.

The layout of stores was designed to maximize product visibility and accessibility, using large, single-floor spaces. This approach allowed for a wide range of products to be available in one location, making shopping more convenient for customers. Operational efficiency was enhanced through advanced logistics and supply chain management techniques. The widespread adoption of technologies such as RFID (Radio Frequency Identification) revolutionized inventory management, enabling real-time monitoring of stock levels and streamlining the supply chain.

Technological integration played a significant role in Retail 2.0. Innovations such as interactive kiosks and smart carts were introduced to enhance the shopping experience. These tools provided customers with additional information and greater convenience, increasing their overall satisfaction.

1990 - Retail 3.0:

In 1995, e-commerce as we know it today was just two years old when Jeff Bezos, a former engineer with an entrepreneurial drive, entered the scene. Bezos founded Amazon, and the rest is history.

What started as an online book-selling venture quickly evolved into a logistics and commerce industry. The fundamental concept was to reduce distribution costs by optimizing product availability through a freemium consultation mode and a continuous inventory management system. Moreover, Bezos' Retail 3.0 not only tapped into a

potentially infinite customer base but also engaged them as "prosumers," leveraging their opinions and preferences to benefit other customers. While experts such as usability and interaction design specialists Jakob Nielsen and Don Normannote note that Amazon's website design prioritizes functionality over aesthetics and experience, this deliberate choice speeds up searches for customers who already know what they want, capturing a significant market share (in the first quarter of 2016, Amazon had over 310 million customers - Source: Statista 2016)

In truth, it was Webvan in 1997 that first ventured into e-commerce in the retail industry. However, Amazon quickly learned to diversify its offerings beyond its initial online bookstore concept, adopting a decidedly disruptive approach. Strengthening its infrastructure to the point of sharing its data centers with the rest of the world and establishing a new business unit, Bezos left a distinct mark on his company, which was ahead of its competitors in managing big data and analytics.

2010 - Retail 4.0: Omnichannel distribution

The term that best describes the essence of Retail 4.0 is the advent of omnichannel distribution. The reason is clear: to align with the evolving behaviors of consumers who increasingly lead both analog and digital lives, heavily relying on fixed and mobile technology, and influenced not only by traditional media but also by social media. Retail 4.0 encompasses various formats that leverage both the physical and virtual worlds, utilizing cloud and mobility solutions, and increasingly opting for hybrid and hyper-convergent approaches. Consumers can now shop online and pick up in-store, select items in-store and order online if they're unavailable, or even purchase online and return items in-store (*BigCommerce*, 2023) Stores, more interconnected and communicative than ever, offer customers multiple options for accessing information online, including kiosks, tablets, interactive mirrors, and walls, as well as apps and solutions like QR codes and beacons to streamline messaging and enhance relationships.

In essence, stores are undergoing a profound transformation through the use of highly intelligent and integrated technologies, coupled with significantly more creative

¹ An individual who acts both as a producer and a consumer, actively influencing the development, customization, and improvement of products or services through their active contribution and feedback

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approaches. Experimentation (Loh, L. H., Rashid, U. K., Te Chuan, L., Choon Sen, S., & Yin Xia, L. (2022). Revolution of Retail Industry: From Perspective of Retail 1.0 to 4.0) becomes an integral part of engagement programs, aimed at better understanding consumer behaviors and preferences.

Retail 4.0 represents a significant evolution in the retail industry, characterized by the integration of advanced technologies and omnichannel strategies to meet the changing needs and behaviors of consumers. This transformation raises two main questions that are crucial for understanding how Retail 4.0 is reshaping the industry.

The main questions are:

- The objective? To personalize sales processes to the extent that they become tailor-made services.
- o *How?* Through new systems of information tracking and tracing, ensuring data and product movement quality from production to distribution, sales, and aftersales, as well as security against counterfeiting and theft (Smart control). This includes engagement and loyalty (Smart marketing), transactions via any fixed or mobile device (Smart payment), and comprehensive support for sales associates and customer journeys (Smart infotainment). If consumers are omnichannel (as 70% are in Italy *Source: Connected Commerce Survey, Nielsen, 2016)*, then distribution must also become omnichannel, harmonizing technology and strategy.
- o What Makes Retail So Special for Customers? The distinct appeal of retail for consumers is found in the personalization of the shopping experience and the connection it creates between them and the products they seek. Retail 4.0, with its omnichannel distribution, transforms shopping into an immersive journey that extends beyond the mere act of purchasing. It tailors the customer experience to individual preferences, leveraging data and technology to anticipate needs and provide solutions even before they are explicitly expressed. The true magic of retail lies in its dual role as a space for discovery and as a provider of convenience. Customers are drawn to retail environments that offer more than just goods; they seek venues that understand their lifestyles and cater to them. This is achieved through innovative engagement strategies that blend in-store interaction with online convenience, thus offering a holistic experience.

From the smart use of interactive technologies that provide detailed product information and comparisons, to personalized recommendations powered by artificial intelligence, retail becomes a key player in enhancing the quality of life for its customers.

Moreover, retail spaces now serve as social hubs where community and commerce intersect, reflecting the human desire for connection and interaction. It is this ability to merge the efficiency of technology with the warmth of human touch that cements retail's position as a pivotal element in the fabric of everyday life, continually adapting to serve the evolving landscape of consumer desires and expectations (Smith, J., & Williams, R. (2021). The Evolution of Retail Spaces as Social Hubs: Integrating Community and Commerce)

1.1.2 The Changing Landscape of Wholesale Distribution in Response to Retail Innovation

Summary table:

These are the topics we will cover regarding the shift from wholesale to retail:

Topic	Description
D2C Models	D2C eCommerce sales reached \$151.20 billion in 2022, up 16.9% from 2021 (eMarketer, 2021).
Tech Advancements	Al and IoT enhance shopping; Al-driven personalization boosts sales by 5-15% (McKinsey, 2020).
Wholesale Employment	Declined by ~2% annually from 2010 to 2020 (Bureau of Labor Statistics, 2021).
Consumer Preferences	70% of Italian consumers prefer omnichannel shopping (Nielsen, 2021).
Competition	Wholesalers compete with D2C retailers and giants like Amazon.
Rising Costs	Wholesalers face rising shipping costs and inventory challenges.
D2C Examples	PepsiCo and Nike shifted to direct sales; COVID-19 accelerated this trend.
Luxury Market	Physical wholesale share in luxury to decline from 59% (2019) to 40-45% (2025) (Altagamma, 2021).
Tech & Engagement	Dropshipping, eCommerce platforms, and social commerce enable direct consumer engagement.
Consumer Demands	Modern consumers seek personalized, seamless shopping experiences, driving retail growth.

- Technological advancement:

Dropshipping Platforms	Sell products without holding inventory. Items are shipped directly from third parties, reducing risk and cost.
eCommerce Website Builders	Tools like Shopify and WooCommerce enable creating scalable online stores with hosting, payment processing, and marketing.
Social Commerce	Integrates e-commerce into social media platforms, leveraging user bases and social influence to simplify buying.
Consumer Expectations	Modern consumers value convenience, speed, and personalization, favoring direct-to-consumer models over wholesale.
Data and Customer Insights	Direct interaction provides valuable data to improve products and marketing, unlike traditional wholesale models.
Agility and Speed to Market	Retail, especially online, allows quick responses to market trends and consumer demands, unlike slower wholesale processes.

With the advent of an increasingly innovative and consumer-focused retail sector, the role and importance of the wholesale sector are undergoing significant contraction. (Supporting Data:

- Shift Towards Direct-to-Consumer Models: According to a report by eMarketer (2021), D2C eCommerce sales in the United States alone were expected to reach \$151.20 billion in 2022, representing a 16.9% increase from the previous year (eMarketer, 2021). This shift reflects a broader trend where brands increasingly bypass traditional wholesale channels to sell directly to consumers.
- Technological Advancements in Retail: The integration of technologies such as artificial intelligence (AI), machine learning, and Internet of Things (IoT) in retail has significantly enhanced the consumer shopping experience. According to a study by McKinsey & Company (2020), retailers who have adopted AI-driven personalization strategies have seen sales increases of 5-15% and cost reductions of 10-30% (McKinsey & Company, 2020).
- O Decline in Wholesale Employment: Data from the Bureau of Labor Statistics (BLS) indicates a gradual decline in employment within the wholesale trade sector. From 2010 to 2020, employment in the wholesale trade industry decreased by approximately 2% annually, reflecting the sector's contraction as retail evolves (Bureau of Labor Statistics, 2021).
- Consumer Preferences: A report by Nielsen (2021) highlights that 70% of consumers in Italy prefer omnichannel shopping experiences, underscoring the

need for retailers to integrate both online and offline channels to meet consumer demands Nielsen, 2021).

While retail merchants promptly adapt to the changing needs of consumers, embracing technology and offering personalized experiences, wholesale distributors struggle to keep pace.

Recent trends in wholesale trade indicate a growing challenge in remaining relevant and competitive. With the rise of e-commerce and online marketplaces, wholesale distributors are facing increasingly fierce competition from consumer-direct retailers and industry giants like Amazon and Alibaba.

Moreover, consumers' preference for personalized and convenient shopping experiences is driving retail merchants to develop internal capabilities in supply chain and logistics management, thereby reducing dependence on wholesale distributors.

At the same time, wholesale distributors are facing challenges related to rising shipping costs, inventory management, and reducing available workforce. The increasing complexity of the competitive landscape is further squeezing the profit margins of wholesale distributors, making it increasingly difficult for them to stay afloat. In 2024, wholesalers are increasingly at risk of coming into competition with their own customers, as manufacturers seek to sell directly to consumers - bypassing the traditional distribution model.

Some examples of this are:

- PepsiCo, which recently launched PantryShop.com and Snacks.com to ship its products straight to people's homes.
- O Nike, which in 2017, showed the world that the B2C trend was coming by slashing its 30,000 retail partners down to just 40. COVID-19 exacerbated this evolution as companies faced major constraints in the supply chain and used digital platforms to circumvent the restrictions.

As discussed in "Wholesale: Crisis or Rebirth? Perspectives of the Channel Divide Experts" (2021) experts have weighed in on the future of the wholesale industry. Despite differing opinions on its health, there's a clear trend indicating a shift in the landscape with the rise of retail.

Federica Levato (2021) a partner at Bain & Company, highlights data from the *Altagamma luxury study* (2021), forecasting a decline in the share of physical wholesale within the luxury market, particularly her considerations predict that the share of physical wholesale in the total luxury market will decrease from 59% in 2019 to 40-45% by 2025.

This reduction is part of a broader strategy by luxury brands to manage their customer networks more directly, controlling every aspect of their value proposition.

According to a *Statista study (Yltävä, 2023)*, in 2022, 64% of consumers worldwide

made a B2C purchase - up 15% from 2019.

This strategic shift is evident in the actions of major fashion houses like Prada and Gucci, which are increasingly focusing on direct sales channels. However, skeptics view these moves as a desperate attempt to revive a wholesale sector already in decline. Paola Carboni (2021) an analyst at Equita specializing in luxury, believes that despite past challenges, the worst may be over for the wholesale sector. Many brands are recognizing the value of multi-brand retailers as tastemakers, contributing to a resurgence in wholesale demand, particularly from local consumers.

Technologies such as dropshipping platforms, eCommerce website builders, and the rise of social commerce - that is, selling directly on social media platforms - have made it easier for manufacturers to connect with consumers without the same burden of setting up traditional retail and logistics.

In conclusion, the shift from wholesale to retail is underpinned by technological advancements that facilitate direct consumer engagement and the evolving preferences of consumers who demand more personalized, convenient, and seamless shopping experiences:

• *Dropshipping Platforms*: These platforms allow businesses to sell products without holding inventory. When a store sells a product using the dropshipping model, the item is purchased from a third party and shipped directly to the customer. This reduces the risk and cost of maintaining inventory, making it easier for manufacturers and retailers to start and scale their operations without significant upfront investment in logistics and inventory management.

- eCommerce Website Builders: Tools like Shopify, WooCommerce, and BigCommerce have democratized the creation of online stores, allowing even small businesses to create efficient, scalable, and customer-friendly online shopping experiences. These platforms provide a suite of services, including website hosting, payment processing, and marketing tools, streamlining the process of setting up and managing an online retail presence.
- Social Commerce: The integration of e-commerce capabilities within social media platforms like Instagram, Facebook, and TikTok has opened new sales channels for businesses. Social commerce leverages the vast user base of these platforms and the power of social influence to promote products in a more interactive and engaging way. Consumers can discover, learn about, and purchase products directly through social media, which simplifies the buying process and shortens the customer journey from discovery to purchase.
- Consumer Expectations and Behavior: Today's consumers expect a seamless shopping experience, whether online or in-store. They value convenience, speed, and personalization, which direct-to-consumer and retail models are better equipped to provide compared to traditional wholesale channels. The ability to research, compare, and purchase products online at any time fits well with the lifestyle of modern consumers.
- Data and Customer Insights: Direct interaction with consumers provides companies with valuable data on customer preferences, buying behavior, and feedback. This data can be used to improve product offerings, tailor marketing strategies, and enhance customer experiences. In contrast, traditional wholesale models often involve multiple intermediaries, which can dilute the insights gained from direct consumer interactions.
- Agility and Speed to Market: Retail, especially through online channels, allows
 brands to respond more quickly to market trends and consumer demands. They
 can test new products, run promotions, and adjust pricing strategies with greater
 agility compared to the slower, bulk-driven processes of wholesale distribution.

1.2 Definition and Key Components of Customer Experience

In the ever-evolving landscape of retail, one critical factor has remained constant: "The customer experience"².

From the inception of retailing to the present day, businesses have continuously strived to enhance the way customers interact with their brands and products. The success of any retail venture hinges not only on the quality of goods offered but also on the overall experience delivered to consumers *Harvard Business Review Analytic Services*. (2022), Throughout history, successful retailers have understood that customer satisfaction is not merely about providing a transactional exchange of goods but rather about creating memorable and meaningful interactions that resonate with shoppers on a deeper level. Emotions are powerful drivers of human behavior. They influence how we perceive, remember, and react to the world around us. They also play a crucial role in our decision-making process, especially when it comes to purchasing products or services. Understanding and managing consumers' emotions provides a competitive advantage in the market and helps create loyal and satisfied customers. Here are some of the reasons why consumers' emotions are important (*FasterCapital* (2022) - Consumer Emotions: How to Evoke and Manage Consumer Emotions and Influence Their Decision-Making Process):

- Emotions affect consumer satisfaction and loyalty: Consumers who have positive emotional experiences with a brand are more likely to be satisfied, loyal, and willing to recommend it to others. For instance, a study conducted by *Harvard Business Review (2022)* found that emotionally connected customers are worth 52% more than those who are merely very satisfied. On the other hand, consumers who have negative emotional experiences with a brand are more likely to be dissatisfied, switch to competitors, and spread negative word-of-mouth. For example, a study by *American Express (2017)* found that 33% of consumers would consider switching companies after just one instance of poor service.
- Emotions influence consumer preferences and choices: Consumers often rely on their emotions, rather than rational calculations, to make purchase decisions.

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² The customer experience (CX) is a fundamental concept in marketing referring to the totality of perceptions and emotions a customer experiences during interactions with a company or brand.

Emotions) can shape consumer preferences and choices by creating associations, memories, and expectations with a brand *Manthiou, A., Hickman, E., & Klaus, P. (2020.*

For example, a Nielsen study (Nielsen. (2015) found that 92% of consumers trust recommendations from friends and family more than any other form of advertising. This is because personal recommendations evoke positive emotions like trust, credibility, and social validation. Conversely, emotions can also deter consumers from choosing a brand if they perceive it as inconsistent, unreliable, or unethical. For example, an Edelman study found that 64% of consumers would stop buying from a brand if they learned it did not align with their values.

- Emotions enhance consumer engagement and retention: Consumers who are emotionally engaged with a brand are more likely to interact with it, share feedback, and participate in loyalty programs. Emotions can enhance consumer engagement and retention by creating a sense of belonging, identity, and community with a brand *Manthiou*, A., Hickman, E., & Klaus, P. (2020).
- For instance, a Forrester study (2017) found that emotionally engaged customers are 6 times more likely to forgive a brand for a mistake, 7 times more likely to buy more from a brand, and 8 times more likely to advocate for a brand. Conversely, emotions can also diminish consumer engagement and retention if they feel ignored, neglected, or betrayed by a brand. For example, an Accenture study found that 52% of consumers switched providers in the last year due to poor customer service quality.

Whether it's through personalized service, innovative store designs, or seamless online experiences, retailers have sought to establish emotional connections with their customers. These connections not only foster loyalty but also drive repeat business and positive word-of-mouth referrals.

As we embark on a journey to explore the retail experience it is essential to first delve into the fundamental role that customer experience plays in shaping the retail landscape. The Customer experience, despite gaining significance within marketing literature and despite numerous attempts, still lacks a unified definition. Indeed, due to its heterogeneous and multidimensional nature, marketing literature and practice have proposed various definitions of this concept over time.

Kranzbühler, Kleijen, Morgan, and Teerling (2018) argue that research approaches towards customer experience have fundamentally been reducible to two different perspectives: the organizational perspective concerned with experience creation and that of consumers, which focuses more on how the customer experience is perceived. The three authors suggest that to fully understand this construct, it is necessary to adopt an approach that considers both perspectives and takes into account, in addition to static aspects, also the evolutionary dynamics of customer experience.

Lasalle and Britton (2003) seek to give meaning to the concept of experience through this passage: "A Customer Experience is an interaction between an organization and a customer. It is a blend of an organization's physical performance, the senses stimulated and emotion evoked, each intuitively measured against customer expectations across all moments of contact." From this definition, it is clear that "an experience cannot occur without customer involvement."

After an interaction between a company and a customer, the latter has the consequence of eliciting a reaction in the customer, which can take the form of a feeling, an emotion, or a thought.

From here, six main components of the customer experience can be inferred (Gentile C., Spiller N., Noci G., (2007),

- Sensory Components: which stimulate the senses, an offering aimed at providing good sensory experiences that appeal to sight, hearing, touch, taste, and smell, all elements that can influence aesthetic pleasure.
- Emotional Components: this component of the customer experience concerns
 the individual's emotional system. It encompasses the emotions, sensations, and
 moods that the offering is capable of eliciting in people who interact with a
 company.
- Cognitive Components: these are all components of the customer experience
 that seek to provide cognitive stimuli to customers. An offering that adopts this
 type of component targets the minds of customers, prompting them to think, use
 their creativity, or solve problems.
- Pragmatic Components: these are all components of the customer experience that simply derive from the practical act of doing something, but they are not

- limited to usability. In fact, they do not only address the post-purchase phase but instead encompass the entire product lifecycle.
- Lifestyle Components: these are the components of the customer experience that arise from the affirmation of specific systems of values and beliefs. Often, the offering generates experiences of this type in customers because the products themselves or their consumption imply belonging to particular values and beliefs that a company and its brand encapsulate.
- Relational Components: these are the components of the customer experience
 that delve deeper into customers, as they refer to people as individuals placed in
 specific social contexts, to the relationships they have with others, and to their
 self-perception within society.

1.2.1 The Gap Between Recognition and Implementation of Customer Experience

However, despite unanimous agreement on the crucial importance of Customer Experience (CX) for business performance, why then are so few companies excelling in this area?

The *Harvard Business Review Analytic Services (2022)* report highlights the discrepancy between recognizing the importance of CX and its actual implementation. Despite 73% of participants acknowledging that improving CX is a fundamental priority, only a fraction act accordingly, with just 10% self-identifying as extremely effective in this area.

This gap between recognizing the importance of CX and its practical application has been further explored by industry experts:

Mat Duerden an associate professor at the Marriott School of Business at Brigham Young University and co-author of "Designing Experiences," emphasized how companies often profess a desire to be experience-centric but fail to convert these intentions into concrete and measurable actions.

In the same vein, *Nicola Buck* Senior ice President of Marketing at BP, shared how their company has endeavored to align the value they communicate to customers with the

actual experiences they provide, underlining the importance of marrying statements and actions in the context of CX.

Similarly, Simon David Clatworthy (2019) author of "The Experience-Centric Organization" and professor at the AHO Center for Design Research, discussed the unrealized potential of CX strategies when they are not supported by investments and concrete actions, highlighting a breakdown in business logic that prevents CX strategies from translating into tangible improvements in customer experience.

To bridge the gap between intention and execution, companies must overcome multiple challenges. Creating a clear vision and assigning dedicated responsibilities are essential steps. Leadership plays a pivotal role in establishing effective CX practices that permeate the entire organization. Obstacles such as compartmentalized thinking and omnichannel friction are significant, and overcoming these requires cross-functional teams and a focus on the customer rather than on individual channels.

A distinguishing factor for successful companies is the speed of adapting to changes in customer expectations, constantly innovating products and services to maintain competitiveness. This requires a holistic approach to CX that involves all departments and levels of the company and the adoption of cross-company measures to effectively evaluate progress. *Harvard Business Review Analytic Services.* (2022). *Transforming Customer Experience Inside and Out*.

Evidence from the report includes the fact that only just over a third of respondents strongly agree that CX is a cornerstone of the company's overall growth strategy. Moreover, organizational silos are identified as the main barrier to delivering optimal CX, according to 34% of participants. However, despite the challenges, only 15% of respondents have clear CX governance, showing significant room for improvement in adopting effective approaches. *Harvard Business Review Analytic Services.* (2022) In summary, transforming CX requires a fundamental change in corporate culture, structure, and technology, with a long-term commitment to adopting a customercentered perspective. Successful companies like Thoughtworks, Norwegian Cruise Lines, and BP demonstrate how defined leadership, multidisciplinary teams, and effective measurement and monitoring of CX can lead to market distinction and customer loyalty over time

1.2.2 Emotions and Clues in CX: A Rethinking Approach

While the research from *Harvard Business Review Analytic Services* (2022) sheds light on current practices and challenges in managing Customer Experience (CX), delving into the underlying mechanisms and historical evolution of the CX concept reveals intrinsic complexity and the need for a more holistic approach, as highlighted by classical theories and emerging trends in the field.

Customer experience (hereafter CX) is considered a differentiating factor in markets where gaining a competitive advantage is particularly challenging. *Abbott (1955)* introduced the idea that what people truly desire are not products, but satisfying experiences. *Pine and Gilmore (1998)* view experiences as distinct from goods or services, implying that customers purchase experiences to spend time enjoying a series of memorable events that a company organizes to engage them in an inherently personal way. Consumer experiences are multidimensional and include sensory, affective, behavioral, and intellectual dimensions. Emotions thus play a distinctive role in the customer experience.

Previous research on CX linked to emotional processes was based on fundamental assumptions that do not hold up well under close scrutiny *Manthiou*, *A.*, *Hickman*, *E.*, & *Klaus*, *P.* (2020). For example, it was always assumed that customers individually experience positive or negative emotions during a CX, but this is not always the case, as they may concurrently experience both positive and negative emotions regarding a purchase decision. Additionally, it was assumed that positive emotions associated with CX were correlated with positive outcomes, such as satisfaction, while negative emotions led to negative outcomes, such as disappointment. However, it has been found *MIT Sloan Management Review*, *April* (2002) that this view is overly simplistic and that emotions can have a more complex impact on customer experiences and their future behaviors.

Furthermore, it was always believed that emotions towards a company's employee automatically transferred to the company itself, but this is not always true, as customers may experience a mix of emotions towards the company and its employees.

Finally, it was often considered that customers were passive victims of their own emotions, but in reality, they have the ability to regulate their emotional experiences *MIT Sloan Management Review, April (2002)*.

These observations challenge some common beliefs in customer experience research and suggest a more nuanced and interpersonal view of emotions in the customer experience.

According to MIT Sloan Management Review, April 2002 has often been a misstep, with the misconception that the management of experiences equates merely to delivering amusement or inventive allure.

The reality is significantly more intricate than such. Examples abound, such as dining establishments that adorn their interiors with cinematic celebrity photos and commercial outlets that suspend motorbikes from the ceiling — these instances show that firms will likely confront disillusionment from client reactions if these elements are not integrated into a thoroughly planned and all -encompassing strategy for customer experience management.

Advancing such a strategy necessitates businesses to thoroughly comprehend the customer's narrative — spanning from pre-experience expectations to post-experience evaluations.

Armed with this understanding, businesses can devise a harmonized sequence of "clues" that address or surpass the emotional desires and anticipations of individuals. The assimilated significance and attributed value of these clues can foster a profound affinity for specific experiences — thereby setting one business's offerings apart from another's.

For a firm, initiating effective total customer experience management begins with acknowledging the clues it dispatches to its clientele. Businesses detecting issues — manifested through declining satisfaction metrics or emerging competitive challenges — should seriously consider adopting a targeted, holistic approach to managing all the clues that resonate with individuals. Thankfully, specialized methodologies exist to facilitate organizations in this endeavor.

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³ "clues" refer to subtle or explicit signals, cues, or indicators that influence perceptions, behaviors, and decision-making processes of customers within the retail environment

Discussing clues, we refer not merely to the informational fragments or tangible proofs discernible solely to the protagonists of detective tales. Indeed, the signs constituting a customer's experience permeate every aspect and are readily noticeable. Every perceivable or sensed element — or its noted absence — serves as a signpost of the experience. Thus, the merchandise or service on offer emits a set of clues, the physical ambiance contributes additional clues, and the workforce — via their actions, remarks, dressing, and vocal intonations — adds further layers of signs. Each clue transmits a narrative, shaping something within the customer's perception. The aggregate of all these clues crafts the total customer experience.

The constituents of a customer experience are dichotomized into two segments (Manthiou, A., Hickman, E., & Klaus, P. (2020). *Beyond good and bad: Challenging the suggested role of emotions in customer experience (CX) research*. Journal of Retailing and Consumer Services)

- Signs associated with the operational efficacy of the product or service:
 predominantly deciphered through the brain's logical faculties.
- Signs associated with emotional responses: encompassing the scents, sounds, visuals, flavors, and textures of the product or service, as well as its surrounding milieu. This division of signs comprises two subsets: "mechanical" (signs generated by objects) and "humanic" (signs generated by individuals). These particular signs primarily engage emotions rather than "The initial step for a company in steering the full spectrum of customer experience is the recognition of the signs it transmits to its audience."

There's unarguable consensus that accurate signs concerning functionality are crucial—should a product be deemed inferior, it will likely face rejection by the marketplace *MIT Sloan Management Review*, *April* (2002).

Yet, what may be less apparent is the coequal significance of emotional signs, mechanical aspects, and humanic factors, all of which synergistically intertwine with operational signs. The customer's valuation is not a mere juxtaposition of functionality against price; rather, it amalgamates both the functional and emotional benefits received against the backdrop of financial and non-financial costs endured.

The pivotal role of emotional experiences elucidates how intangible costs can overshadow considerations of price. Were the value's burden component solely driven by price metrics, luxuries such as first-class flights would find no takers, and retail giants like Wal-Mart would overshadow all competition.

Businesses lacking in attunement to the nuances of customer experience, focusing solely on cost reduction to prop lower pricing strategies, might inadvertently erode the intrinsic value of their propositions. Maximizing experiential engagement as a component of customer value proposition necessitates firms to judiciously manage the emotional facets of experiences with the same diligence applied to the operational aspects of products and services. Initiating this journey entails close observation of customers and engaging in dialogues concerning their experiences to garner deeper insights into the signs they encounter and interpret throughout their brand interactions. The ultimate aim for any enterprise, naturally, is to align perfectly the set of signs it provides to its customers. Yet, mastery in customer experience management is an evolution, not an overnight metamorphosis. Fortuitously, specific tools and methodologies are available that, when methodically applied, can empower organizations to cultivate the requisite expertise.

A primary instrument in this process is the "experience audit," an approach whereby companies engage intimately with their clientele's real-life interactions MIT Sloan Management Review, April (2002). By deploying fixed and covert cameras, firms can amass extensive real-world client experience data. While legal, transparency with customers about surveillance can foster trust. Post-collection, detailed analysis of this footage, alongside comprehensive interviews with clients and employees, provides insights into the myriad emotional dynamics at play during customer interactions. However, mere video evidence is insufficient; thorough dialogues are indispensable for a holistic understanding of the experiential landscape.

Following the audit's conclusion, the next instrument is the formulation of an "experience motif," a distilled essence of the findings reflecting the organization's core ethos and brand strategy. This motif serves as a guiding beacon for all experience management initiatives, providing coherence and direction for every newly minted customer interaction. The motif becomes the bedrock for the development and definition of new signs. Articulated through visual representations and narrative formats

tied to employee roles, this thematic cornerstone fosters an integrated approach to redefining customer engagements.

Executed with meticulous care and strategic insight, these endeavors — encompassing audits, narrative constructions, and thematic development — transmute into a vital component of an organization's blueprint for enhancing and monitoring customer experience. Establishments that undertake comprehensive audits followed by strategic implementations elevate their market stance. While rivals may seek to emulate, genuine replication remains elusive without an authentic grasp of the intricate dynamics involved. Meanwhile, trailblazers who embed these comprehensive strategies into their operational DNA continually evolve, deepening customer loyalty and elevating the overarching experience, thereby solidifying their competitive edge.

1.2.3 Emotion Dynamics: Exploring the Impact on Customer Experience

Besides playing a key role in customer experience, emotions also predict future customer behaviors (Gaur et al., 2014; Penz and Hogg, 2011). Emotions experienced influence customers at different stages of the purchasing decision process (Roster and Richins, 2009; Maguire and Geiger, 2015). According to Otnes et al. (1997, p. 82), "the simultaneous or sequential experience of multiple emotional states by the customer, as a result of the interaction between internal factors and external objects, people, institutions, and/or cultural phenomena in market-oriented contexts, can have direct and/or indirect repercussions on pre-purchase, purchase, or post-purchase attitudes and behaviors." However, the longstanding view that positive emotions are linked to positive purchasing outcomes (e.g., satisfaction, behavioral intention, positive WOM), and negative emotions to negative consumption results (e.g., dissatisfaction, purchase avoidance) does not always hold (e.g., Namkung and Jang, 2010; Bilgihan et al., 2016; Spielmann, 2020). This study Manthiou, A., Hickman, E., & Klaus, P. (2020), Beyond good and bad: Challenging the suggested role of emotions in customer experience, considers satisfaction as a positive global evaluation or emotional state (Olsen et al., 2005). Oliver (1997, p. 28) suggests that satisfaction is "the consumer's fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant". Imagine being really happy with a product/brand (a positive emotion), but dissatisfied because it is not available for purchase (a negative outcome). Goodstein et al. (1990)

observe that uncomfortable emotions lead to more favorable attitudes toward an advertisement, whereas feelings of disinterest lead to more unfavorable ones. Feeling stressed (a negative emotion) increases when one desires a reward, which is a positive outcome.

Emotional Experiences with a Company and Its Representatives:

Companies need to attract and retain customers to ensure a sustainable competitive advantage. Therefore, they need to pay attention to customers' emotions at the transaction-specific level and for their overall evaluation of their experience with the company. Both evaluations influence customer repurchase behavior and, ultimately, the performance of the company (*Jones and Suh, 2000; Klaus, 2015*).

The following paragraphs will outline the various types of interactions:

 Company-Customer and Employee-Customer Relationship: Dynamics and Implications

Many companies invest heavily in relationship marketing on the premise that close company-customer and employee-customer relationships will lead to positive financial outcomes (Palmatier et al., 2006). This implies that customers view company employees and companies themselves as two different relational targets (Yim et al., 2008; Jones and Suh, 2000). For instance, a customer may have an unsatisfactory experience with a flight attendant on one flight and still remain satisfied with the airline due to other positive interactions during this customer experience. Customers are likely to comment on specific service events (e.g., specific employee actions) when asked about transaction-specific experiences (Jones and Suh, 2000). However, when asked about their overall satisfaction, customers are more likely to comment on their overall impressions and general experiences with the company (e.g., the company's honesty) (Yim et al., 2008). According to Porath et al. (2010), rude encounters with employees lead consumers to make false negative generalizations about: others who work for the company, the company as a whole, future encounters with the company, inferences that go beyond the rude incident.

The Appraisal Tendency Framework (ATF)⁴ (Lerner and Keltner, 2000, 2001) explains this behavior. The ATF serves as a basis for predicting the influence of specific emotions on customer decision-making. The ATF addresses specific emotions carried over from past situations and might color future judgments and choices (Lerner and Keltner, 2000, 2001). In other words, transaction-specific satisfaction/dissatisfaction does not always correspond to overall satisfaction/dissatisfaction with a company. Mende and Bolton (2011) theorize that employees are targets of human attachment, while the company is an abstract attachment target. Their findings showed that customers who cannot develop interpersonal bonds with a company's employees compensate for this deficiency by being more likely to bond with the company (Mende and Bolton, 2011), which shows that customers' relational goals differ from those of the company and its employees.

Beyond the general customer-company relationship, a customer's experience with an employee is also a key strategic competitive tool (Mattila and Enz, 2002). Customers' perceptions of face-to-face encounters with employees are an important determinant of customer satisfaction and loyalty (Liljander and Mattsson, 2002; Winsted, 2000). The role of service encounters is also well established in the marketing literature (e.g., Mattila and Enz, 2002; Raajpoot, 2004; Jayawardhena et al., 2007). Chandon et al. (1997) developed a dyadic assessment of service encounters encompassing the employees' competence, their listening behaviors, their dedication, and their effectiveness.

⁴ The Appraisal Tendency Framework (ATF) is a theoretical model that explores how specific emotions influence individuals' decision-making and judgment processes. According to the ATF, emotions not only color immediate perceptions but can also impact future evaluations, expectations, and choices. This approach aids in better understanding consumer behavior complexity and can provide significant insights into improving customer experience (CX) management

Researcher(s)	Year	Description of Measure	Dimensions Covered
Winsted	2000	Developed a three- dimensional measure to assess service encounter evaluation.	Concern, Civility, Congeniality
Raajpoot	2004	Created a measure for service encounter quality, which includes several dimensions.	Tangibility, Reliability, Assurance, Sincerity, Personalization, Formality, Responsiveness
Jayawardhena et al.	2007	Uncovered a four-factor structure of service encounter quality.	Professionalism, Civility, Friendliness, Competence

Moreover, an employee's interaction with a customer can synchronously affect other customers' experiences either positively or negatively (Bitner, 1992; Jung et al., 2017). These encounters may thus become an integral part of the customer's image of the company and, in turn, could play an influential role in determining its success (Bitner, 1990). These significant interactions occur within the strategic service triangle, where the three interconnected groups (customers, the company, and employees) collaborate to develop, promote, and deliver an offering (Zeithaml and Bitner, 2003). The simultaneous investigation of a customer-company and a customer-employee emotional experience has received relatively little attention in the literature (Mende and Bolton, 2011; Jones and Suh, 2000; Porath et al., 2010).

 Interpersonal Relationships and Emotional Self-Regulation in Customer Interactions:

Customers can regulate their emotional experiences, it is argued that customers have the ability to control their emotional experiences, whether these are negative, positive, or mixed. Customers are not mere passive subjects of their emotions but can endure and govern an emotional encounter; examples include: if a positive outcome outweighs the experienced negative emotion, or if a positive emotion is concealed to gain a reward or better service. Customers who manage their emotions are more inclined to interpret a stressful situation positively by putting it into perspective. *Gross (1998)* argues that individuals can manage their emotions through suppression or reappraisal. Customers who

employ reappraisal experience a reduction in the negative aspects of an emotional experience (Goldin et al., 2008).

Customers might feel mixed emotions during an event, especially during complex scenarios that include both pleasant and unpleasant elements (Larsen & McGraw, 2014; Larsen et al., 2017). If the goal of the customers is to achieve a positive result, such as quick service or delivery, this might outweigh the experienced negative emotion, such as the need to pay a premium for overnight delivery or for a fast service meeting. Psychological research (Gross, 1998; Grandey et al., 2004; Greenaway & Kalokerinos, 2018) suggests that customers' motivational goals might allow them to modify their emotional reactions.

The model of goal-directed behavior (MGB; formulated by Perugini and Bagozzi, 2001) integrates motivational and affective processes with past behavior and socio-psychological theories such as reasoned action (Ajzen & Fishbein, 1980), as well as the theory of planned behavior (Fishbein & Ajzen, 2005). Han and Rhu (2012) highlight that the weakness of the theory of planned behavior is that it does not include motivational processes (desires), affective processes (anticipated positive and negative emotions), and past behavior, all of which are crucial elements. Perugini and Bagozzi (2001) introduce negative and positive emotions as motivators for desire and behavioral intention in the MGB model. Meng and Choi (2016) later extended the MGB model into the tourism sector and confirm that emotions and past behavior have a positive impact on desire and behavioral intention. This literature emphasizes the importance of emotions in customer experience and how they can influence behavioral intention.

It is well acknowledged that emotions (both negative and positive) can predict a customer's intention, desire, and change in behavior.

Customers engage in emotion regulation to attain desired outcomes; for instance, they might change their behavior to seek a reward or achieve a desired goal (*Tamir*, 2016). However, as indicated by *Balaji et al.* (2017), there is a noticeable shortage of research on customer emotional regulation and its impact on subsequent customer behavior.

It is extensively recorded in the literature that there is a strong connection between emotions and satisfaction. The findings of *Han and Rhu (2012)* emphasize that customer satisfaction is determined by both positive and negative emotions, and that customer satisfaction has the most significant effect on customers' intentions to repurchase. Customer satisfaction could be a result of anticipated positive and negative emotions, which have a positive influence on customers' repurchase intentions. In the context of service failure, both positive and negative emotions impact satisfaction (*Schoefer*, 2010) and satisfaction with recovery (*Kuo & Wu*, 2012).

The Dynamic Nature of Customer Emotions: Tracking Changes Over Time It's critical to capture customer emotions not as memories, but during actual customer experiences (CX). Physiological experiments, such as measuring emotional arousal through galvanic skin response, are used to gauge reactions that could alter altruistic behavior, particularly when participants are presented with indulgent options (Guerreiro et al., 2015). There's a call for more research employing physiological tests like electrodermal activity (EDA) to more accurately and real-time gauge emotional arousal instead of relying on recall (Caruelle et al., 2019).

Greenaway and Kolokerinos (2018) highlight that customers don't always display what they feel, nor always feel what they display. Emotional goals arise when there's a discrepancy between the current state and a desired one, differing from standard emotion regulation strategies (Tamir, 2016). This has led to calls for research into the predictors of an emotional goal and how customers employ various emotion regulation strategies in response to an experience.

o Customer-to-customer relationship:

This type of relationship ca significantly shape an emotional experience. Contrary to considering emotion as purely a personal experience, we challenge this view and highlight how social interactions shape a customer's emotional journey. The lack of empirical research on customer-to-customer interaction and its impact on a customer's emotional experience points to a significant gap in understanding (*Tombs and McColl-Kennedy, 2013; Zomerdijk and Voss, 2010*).

Other customers can negatively impact the ambiance, potentially reducing consumption and affecting customer satisfaction (Miao et al., 2011). Mattila et al. (2014) support these findings in service failure scenarios, where witnessing unfair treatment towards other customers leads to negative emotions, lower fairness evaluations, and a reduced likelihood of return.

Sierra and McQuitty (2005) underline the importance of social exchange in the service sector, arguing that social exchanges create a sense of shared responsibility, leading to positive emotional responses and loyalty. Arnold (2017) supports this, noting that supportive behaviors from other customers can influence one's judgment of service quality. Although customer-to-customer interactions are uncontrollable, a positive experience can facilitate a positive interaction among customers, supporting Rosenbaum and Massiah (2007) who found that when customers receive social and emotional support from others, they display voluntary performance regarding the service and towards other customers.

Lin et al. (2018) explored the social influence of in-group and out-group on emotions. While their research primarily examines negative emotions, their findings emphasize the significance of group behavior; the more similar the respondents, the more influential they become within the group. This results in participants adjusting their emotions towards rewards and positive valuations. Goldenberg et al. (2020) support this, suggesting that the motivation to experience weak emotions leads participants to be more influenced by emotions weaker than their own, showcasing the substantial impact of social influence on emotion.

1.2.4 Analyzing the Role of Contradictory Emotions and Surprise in Shaping Customer Experiences

Businesses build potential customer experiences by blending a range of tangible and intangible elements, carefully arranged to elicit emotional engagement. However, as customer experiences are shaped by context and carry symbolic meaning, with the customer at the heart of the experience, companies must grapple with the variability of

individual perception, which inherently lies outside their control. The influence of individual subjectivity is critical, especially in customer-centric strategies aimed at capturing consumer insights to effectively approach markets.

As customer-focused approaches progress, it's crucial for companies to balance two conflicting needs:

- Encourage active consumer participation, inviting them to engage in co-creating experiences to amplify positive reactions.
- Maintain control over customer experiences to attempt to limit the emergence of risks and undesirable aspects, as the outcome of customer interaction remains beyond the full control of providers.

Finding a middle ground between these two opposing needs is essential for any entity involved in designing marketing stimuli and events aimed at creating unforgettable experiences for customers. Although understanding the conditions under which marketers can influence consumer emotions is vital, this area of study has been neglected until now. The following study *Addis, M., Miniero, G., & Soscia, I. (2018)*, Which examines both anticipated and surprising emotional reactions of customers to event experience elements, enriches the literature on consumer experiences.

Focus is placed on events for their significant role in boosting customer engagement and strengthening brand image. These events range from webinars, fairs, festivals, and exhibitions to thematic initiatives and special occasions, designed to engage customers and promote brands in specially created experiential contexts. Investment in events and experiential marketing is growing, with budgets increasing by 6.1% in 2015.

However, designing customer-oriented experiences in social contexts leads to a reduction in control over the emotions elicited, as the potential for negative feelings can lower the experience value due to the influence others' presence can have on the customer experience, both positively and negatively. This study focuses on the impact of negative emotions on customer-oriented experiences, examining an event designed to evoke surprise and feelings of romantic love in young consumers, two emotions commonly leveraged by companies in their entertainment services.

Sharing experiences with peers introduces the risk of experiencing a negative feeling: embarrassment. This emotion arises when others' presence is perceived as a threat to one's positive social image, and might be considered the antithesis of romantic love.

Consequently, embarrassment can diminish the perceived value of the experience, affecting customers' attitudes and behavioral intentions toward the brand. However, the negative impact of embarrassment can be mitigated by surprise, a neutral and manageable emotion, frequently employed in the design and planning of service experiences to elicit excitement in customers and create unforgettable memories during special occasions. Thus, surprise serves as a moderating tool capable of softening the negative repercussions of the experience, acting as a counterbalance to the unexpected manifestation of negative emotions.

This study *Addis, M., Miniero, G., & Soscia, I. (2018)* offers new insights into the role of conflicting emotions in social interactions, examining:

- The emotional engagement of customers within the experience, emphasizing the managerial value of surprise, a neutral emotion. This broadens the spectrum of emotional reactions commonly explored in customer experiences.
- The perspective of the customer rather than the organizational viewpoint on customer-centric experiences, assessing the unplanned negative emotional reactions of customers to events and quantifying empirically the impact of such reactions on customers' attitudes and behaviors.

The active engagement of customers in co-creating experiences can sometimes lead to unintended outcomes. Although companies try to prevent their customers from experiencing negative emotions, there are circumstances where such emotions might emerge due to the inherently subjective nature of any customer-focused experience, thus exposing companies to the risk of eliciting adverse reactions

Sharing experiences with peers introduces the risk of experiencing a negative feeling: embarrassment. This emotion arises when others' presence is perceived as a threat to one's positive social image, and might be considered the antithesis of romantic love. Consequently, embarrassment can diminish the perceived value of the experience, affecting customers' attitudes and behavioral intentions toward the brand. However, the negative impact of embarrassment can be mitigated by surprise, a neutral and manageable emotion, frequently employed in the design and planning of service experiences to elicit excitement in customers and create unforgettable memories during special occasions. Thus, surprise serves as a moderating tool capable of softening the

negative repercussions of the experience, acting as a counterbalance to the unexpected manifestation of negative emotions.

Events as Catalysts for Ambivalent Emotions:

Active consumer participation in engaging social environments during events creates a powerful experiential platform (Raghunathan & Corfman, 2006). Direct interactions add to the dynamic nature of the experience (Healy et al., 2007), triggering positive feelings and an increase in excitement, interest, affection, renewed vitality, and emotions during shared moments (Howard & Gengler, 2001), leading to an enhanced customer perception of the overall experience (Ramanathan & McGill, 2007). Despite the generally recognized positive impact of emotions on consumers' attitudes towards brands (Lau-Gesk & Meyers-Levy, 2009), only a limited amount of research has explored their effect on the persuasive strength of communication. However, research tends to overlook the negative emotions elicited by brands and associated events (Grant & Walsh, 2009). The emotional experience related to consumption has been thoroughly examined by Richins (1997), who identified a broad set of emotions from psychology, adapted to consumption contexts. Richins (1997) argues that traditional tools for assessing emotions in psychology might not be suitable for analyzing consumption behavior and introduces a list of emotions specifically experienced in consumption contexts, creating an inventory for their measurement.

This study focuses on three of these emotions: romantic love, embarrassment and surprise:

o Romantic Love:

Within the broad spectrum of emotions, events held in social settings are often designed to evoke positive feelings towards others, typically identified as romantic love and gratitude. Despite originating from similar contexts, these emotions significantly differ, especially in their triggers. Romantic love arises as a subjective response to both appreciation for another's actions and attraction towards another person, whereas gratitude stems from a cognitive process related solely to appreciation.

Thus, romantic love is characterized as a positive affection directed towards both the actions and the personality of others, encompassing both appreciation for others' actions and attraction to them. Depending on whether attraction or appreciation is predominant, love transforms into either romantic love or friendship (Ben-Ze'ev, 2000). Although the general category of love primarily refers to romantic interpersonal relationships, romantic love can also extend to brands, products, and consumption experiences (Castano & Perez, 2014; Koo & Kim, 2013), as well as to employees and other customers. Consequently, marketing strategies often aim to leverage this emotion (Batra et al., 2012). This study explores romantic love as a positive emotional response to participating in brand-related events, specifically designed for this purpose. Companies may deliberately evoke romantic love when designing event experiences, for example, through engaging activities or offering interactive gaming contexts. Since such initiatives are likely to elicit positive reactions, it is reasonable to expect that such positivity will be attributed to the brand.

o Embarrassment:

While the goal of events is to evoke positive feelings in consumers and enhance interpersonal connections, the social presence of others can sometimes trigger the opposite effect, threatening the social image individuals strive to maintain (Miller & Leary, 1992). Although embarrassment is a universally acknowledged emotion, being a common occurrence in everyday social interactions (Dahl et al., 2001; Grant & Walsh, 2009), its impact on events remains partially unexplored (Grace, 2007, 2009). Embarrassment can be described as "an uncomfortable emotional state triggered by situations that heighten the risk of being negatively evaluated by a real or imagined social audience" (Dahl et al., 2001, p. 474). It acts as an unintended "negative externality," resulting from the presence of others and the anxiety about their judgment (Schlenker & Leary, 1982). Since the potential sense of inadequacy at an event — i.e., the possible trigger of negative emotional reactions — is linked to the violation of social norms and requires an audience, this analysis focuses on embarrassment as a negative social emotion. Following Ben-Ze'ev and Goussinsky (2008), it is

hypothesized that events designed to evoke romantic love may paradoxically result in embarrassment as a negative emotional reaction. Indeed, although they are contrasting emotions — romantic love is viewed positively, while embarrassment negatively — both reflect the deep values of an individual.

o Surprise:

In communication contexts in general, and marketing events in particular, the "surprise factor" plays a significant role, with managers continually and extensively seeking to stimulate and astonish customers, eliciting their curiosity and engagement (Bowdin et al., 2006), and thereby their customer satisfaction (Berman, 2005). Indeed, as discovered by d'Astous and Gagnon (2007), consumers who are pleasantly surprised during a consumption experience show higher levels of satisfaction compared to those who are not surprised during a similar experience. Consequently, surprise is a common response to be expected when participating in unexpected or new events (Silvia, 2009). Surprise has been defined as "amazement, wonder, or astonishment that grows with the unpredictability and significance of an event" (Valenzuela et al., 2010, p. 792). It is generally an adaptive mechanism based on evolution, triggered by unexpected events that deviate from an activated cognitive schema (Schützwohl, 1998). More recently, the link between surprise and probability has been questioned, with researchers finding converging results that the level of surprise is more closely associated with the difficulty of integrating the event with an existing representation (Maguire et al., 2011). When incoming data - that is, data from the environment - do not match previously developed cognitive schemas, "organized knowledge structures that represent concepts such as situations, objects, events, and actions at various levels of abstraction" (Schützwohl, 1998, p. 1183), individuals might lose the ability to comprehend current inputs and to predict future events (Rumelhart & Ortony, 1977). Therefore, a schema revision is necessary; the surprising event captures attention, even involuntarily, and surprise is generated (Folk et al., 1992;

Schützwohl, 1998). When individuals witness a surprising event, they react in three ways:

- Express subjective feelings of surprise;
- Interrupt ongoing activities; and
- Focus their attention on the event causing surprise (Schützwohl, 1998; Silvia, 2009). As a result, a surprising event challenges individuals' pre-existing mental structures and engages them in interpreting these new inputs (Schützwohl, 1998). As a consequence, central attentional resources are primarily focused on interpreting and evaluating the triggering event (Kahneman, 1973). Since these cognitive resources are limited (Kahneman, 1973; Marois & Ivanoff, 2005), the interpretation of the surprising event can distract consumers' attention from embarrassment-inducing stimuli, thus somewhat reducing the impact of this negative and undesired affective reaction. Surprise acts as an interruption mechanism (Meyer et al., 1997). Consequently, the negative impact of embarrassment should be lower for participants who are surprised compared to those who are not.

1.3 Customer Journey

Venturing into the realm of the customer journey offers a deeper insight into how each interaction and touchpoint weaves into the broader tapestry of customer experience. This exploration reveals how individual moments collectively shape a customer's overall perception and the value they derive from it. The transition from focusing merely on customer experience to emphasizing the customer journey highlights a more nuanced understanding of customer interactions.

The "customer journey" extends the definition of "customer experience" by mapping the specific path taken by a customer.

This journey of discovery reveals how individual moments cumulatively sculpt the customer's overarching perception and the ensuing value.

The concept of "customer journey" is deeply integrated into the definition of "customer experience," as analyzed by Lemon and Verhoef (2016). It is identified with the path taken by the customer in interacting with a company, passing through a plurality of

touchpoints or points of contact, outlining a journey that extends from the pre-purchase phase to the post-purchase phase. According to Zomerdijk and Voss (2010), the customer journey encompasses the set of activities and events connected to the delivery of a service, all viewed from the lens of the customer, emphasizing each encounter as crucial to building the consumer's overall experience.

The framework outlined by Lemon and Verhoef provides an in-depth view of the customer journey, breaking down the overall interaction into three key segments, each representing a distinct phase of the customer's overall experience with the company and its services:

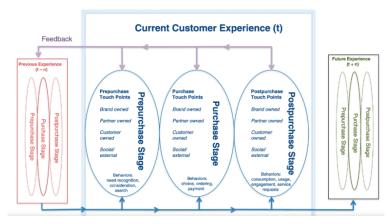


Figure 1: Process Model for Customer Journey and Experience

- o **Pre-Purchase Phase**: This section of the customer journey encompasses all preliminary interactions between the customer and the brand, such as product exposure and the influence of the surrounding environment, before an actual purchase occurs. In this phase, typical activities identified by marketing include recognizing the customer's need, gathering information, and evaluating available options. This stage focuses on the cumulative customer experience from identifying a need to making the decision to proceed with the purchase.
- O Purchase Phase: In this stage, the customer directly interacts with the brand or the sales environment to complete the purchase. Key actions here include product selection, order placement, and payment finalization. This is typically the most concise phase but is strategically crucial as it focuses on the dynamics influencing the customer's purchase decision, influenced as much by the

- physical or digital atmosphere of the point of sale as by the quality of interaction with the brand.
- O Post-Purchase Phase: This segment covers all interactions that occur after the customer has completed the purchase, encompassing product or service usage and consumption, ongoing engagement with the brand, and any post-sales assistance requests. Critical in this phase is the role of the product as a strategic touchpoint and the resulting interactions, which may extend throughout the lifespan of the purchased product or service.

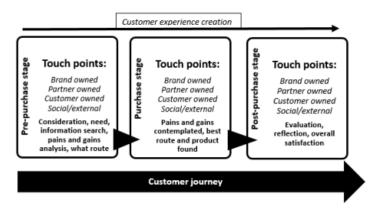


Figure 2: Conceptual model of the Customer Journey

The model acknowledges that customer experience is not solely formed by elements directly controlled by the company but is also influenced by external factors, which companies can only attempt to modulate indirectly. Customers shape their own experiences based on their perceptions of interactions with the company, indicating that companies do not have full control over the entire experience. Therefore, instead of attempting to dominate every aspect of the experience, companies should aspire to create ideal conditions to enable customers to have the desired experience. This involves an iterative process that not only encompasses current and past experiences but also considers the influence of various external factors beyond the company's direct control, thus shaping customers' future expectations and evaluations.

Interactions and past experiences play a critical role in shaping future expectations and in strengthening relationships between customers and brands, leading to prolonged engagement and increased brand loyalty. Consequently, customer experience evolves into a continuous cycle reflecting the dynamics of the customer-brand relationship over

time, under the influence of both elements directly controlled by the company and those external to its direct control.

Studies have shown that major environmental factors, such as economic conditions, exert a significant influence on customer experience. Specifically, recessionary periods tend to worsen customers' perception of the offered experience, while periods of economic growth tend to improve it. Additionally, competition represents another crucial external element that directly influences customer experience and must be constantly monitored by companies.

In analyzing customer experience, it is vital to adopt a perspective that considers the entire customer journey. This approach entails a deep understanding of the customer-company interaction, considering the customer's point of view and identifying key moments in each phase of the journey. Once identified, it is necessary to examine touchpoints ⁵ that emerge along the journey, and identify those strategic elements that influence the customer's decision to continue or discontinue the journey with the company.

Touchpoints, defined as episodes of direct or indirect contact with the brand, range from verbal interactions, such as advertising, to non-verbal interactions, such as product usage. These should not be confused with channels, which refer to the means through which information is transmitted. It is crucial to distinguish between the two concepts: channels relate to communication and sales mediums, while touchpoints represent real interaction points between the customer and the company. *Dhebar A., (2012), "Toward Compelling Customer Touchpoint Architecture", Business Horizons*

The approach to customer experience should be holistic, ensuring that touchpoints are integrated consistently and seamlessly to create a unified system of interactions. This holistic view is necessary because customers perceive their journey with the company as a single experience, evaluating the totality of interactions rather than individual episodes. Thus, companies must aim for a comprehensive assessment, rather than focusing on isolated aspects, to ensure a complete and satisfactory customer experience. The ultimate goal for companies is to establish an integrated management of consumer relationships, a fundamental approach to ensuring a holistic customer experience. This must remain consistent across all touchpoints, avoiding discontinuities and

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⁵ Touchpoints are points of contact between the customer and the company

redundancies when transitioning from one point of contact to another. According to *Verhoef and Lemon*, touchpoints, distinguished based on their ownership, include:

- Company-Owned Touchpoints: These are points of contact directly under the company's control, including tools such as advertising, websites, loyalty programs, emails, and the sales force.
- Partner-Owned Touchpoints: These concern interactions managed in collaboration between the company and its partners, such as marketing agencies, retailers, and logistic service providers.
- Customer-Owned Touchpoints: They represent independent actions
 undertaken by customers that influence their overall experience without direct
 control from the company or its partners, such as recognizing the need and
 choosing the payment method.
- External Social Touchpoints: These involve the influence of third parties
 external to the company and its partners, such as other customers, influencers,
 independent sources of information, and the surrounding environment,
 especially during the purchase phase.

It is crucial to note that *Lemon and Verhoef's (2016)* customer journey model not only explores the current customer experience but also includes an analysis of the customer's past and future experiences. Therefore, companies must devise strategies that promote loyalty and encourage customers to return, thus completing the customer journey cycle. For effective management of the customer journey across various touchpoints, it is fundamental to use tools such as the customer journey map. This graphical tool allows visualizing the sequence of events through which customers interact with the organization, providing a clear overview of various points of contact and identifying areas of improvement to optimize the overall customer experience.

1.3.1 The customer journey: The 5 "A" model

Kotler, considering the new dynamics of connectivity that characterize the interaction between companies and consumers, has proposed a personal revision of the traditional models of the customer journey, defining his own framework known as the five "A"s:

"Aware": This initial phase sees consumers passively becoming aware of brands
 and products through previous experiences or via the marketing activities of

- companies, as well as through word-of-mouth from other consumers. Here, the central element is brand awareness, primarily sustained by corporate marketing and word-of-mouth.
- "Appeal": During this phase, certain brands become known to consumers, who
 are bombarded with messages that influence both short-term and long-term
 memory. Eventually, some brands capture the consumer's interest, positioning
 themselves as the primary choices for a potential purchase.
- "Ask": Consumers actively seek information about brands of interest from a variety of sources, including social networks and corporate resources, both online and offline. The era of connectivity necessitates an integration between digital and physical, highlighting the importance for companies to be present across all channels.
- "Act": This phase is not limited to the purchasing decision but extends to usage, consumption, and after-sales. Companies must strive to build a long-term relationship with customers and ensure a positive and valuable experience even after the purchase.
- "Advocate": Over time, customers can develop deep trust and loyalty towards a brand, leading to loyalty behaviors such as repurchasing and, more importantly, promoting the brand to others. Advocacy occurs when customers, having accumulated positive experiences and feelings, become brand supporters and begin to actively promote it without direct invitation from the company. Kotler argues that the primary goal of marketing should be to guide customers from the stage of awareness to that of active promotion, emphasizing the vital role of "advocates" in the value-creation process. This evolution underscores the importance, in modern marketing, of transforming customers from mere consumers into true brand evangelists.

1.3.2 Customer Journey mapping Tailored for Retail Sector

The most effective method for managing interactions with current customers involves adopting a customer-centric approach, emphasizing the customer's journey through various touchpoints during interaction with a company. From a more technical and

strategic perspective, the Customer Journey Map (CJM) Rosenbaum M. S., Otalora M. L., Ramírez G. C., (2017) emerges as the primary tool for navigating the customer's journey, being a strategic resource that maps all the potential touchpoints with which a customer can connect during their experience with a company. Rosenbaum, Otalora, and Ramírez (2017) characterize this resource as a useful strategic management tool, increasingly recognized in both the academic and practical fields for its ability to outline the customer's experience within an organization. The Customer Journey Map is fundamentally a visual representation that details the sequence of events and touchpoints through which a customer interacts with a company along their purchase journey, extending beyond the mere purchasing phase to include research and postpurchase stages as well. This map thus provides a visual framework that helps companies reconstruct and understand customer interactions across various channels and touchpoints, both online and offline. It is essential that companies, in creating and designing the map, identify with the customer's perspective to ensure the tool's effectiveness. This approach is crucial for deciphering the motivations behind customer actions, such as choosing to buy in a physical store versus online, and for understanding how and where consumers seek information or assistance. The map, therefore, catalogs all possible touchpoints a customer might experience in their relationship with the company, including digital ones (such as the website and social media) and physical ones (such as retail outlets and traditional advertisements). Stein and Ramaseshan (2017) point out that customers undergo experiences every time they interact with any part of the product, service, brand, or organization, across different channels and at different times, defining these encounters as "touchpoints." These can be both directly managed by the company or indirect, as in the case of recommendations or online reviews. Importantly, in mapping, touchpoints should be organized in a sequence reflecting the three stages of the buying cycle: pre-purchase, purchase, and postpurchase, each with its specific touchpoints. Companies should group these touchpoints into strategic categories along a vertical axis⁶, which outlines initiatives aimed at improving the experience at each touchpoint. This approach reduces complexity and increases strategic clarity, allowing different business functions such as marketing,

⁶ Vertical Axis: Refers to the organization of touchpoints in a Customer Journey Map, classified into strategic categories that correspond to different stages of the customer lifecycle, such as pre-purchase, purchase, and post-purchase.

human resources, and IT to work in a coordinated manner to meet customer expectations. Consequently, the Customer Journey Map becomes an essential strategic tool for companies, enabling a more effective understanding and improvement of the overall customer experience. Furthermore, it is vital to recognize that the Customer Journey Map should not necessarily focus exclusively on the transversal aspects of the customer-company interaction. The debate among experts on the vertical orientation of the maps highlights different schools of thought: some prefer a purely horizontal⁷ representation of touchpoints, excluding the vertical axis, while others advocate the importance of including more emotional and personal evaluations of customers, such as their perceptions, emotions, and feelings for each touchpoint. Some professionals see the vertical axis as an opportunity to detail various strategic elements, such as customer objectives, brand management, or staff activities, thus leveraging omnichannel opportunities. This multifaceted view of the customer journey introduces greater complexity but, when well managed, allows for a more complete and integrated view of the customer experience, providing a basis for coordinated and targeted improvement strategies Bolinder, M., & Boström, P. (2019). To make the Customer Journey Map a truly strategic and functional tool, companies must avoid overloading the map with too many touchpoints of lesser strategic importance, which could make the tool too complex and less practical. It is crucial to focus on the touchpoints that customers consider most important, ensuring that the map remains focused on the key areas that most significantly affect the customer experience. Designing and using the Customer Journey Map require a customer-centered approach, ensuring that every touchpoint is analyzed from the customer's perspective, to better understand how touchpoints are used and how they can be optimized. By implementing this strategic tool, companies can not only better understand their customers' journeys but also identify critical areas for improvement, thus helping to build a more consistent, satisfying, and memorable customer experience. The three authors provide an example of a customer journey map for a company in the retail sector:

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⁷ Horizontal Axis: Represents the sequence of events and touchpoints a customer encounters with a company, arranged chronologically from the initial contact through various stages of engagement to post-purchase interactions.

Touchpoint

		Visit HPM in the past	Talk to others about the	See highway billboard
			mall	
Strategic	Mall shopper	To have the same	To have a positive attitude	Advertisements must be
Action	requirements	experience as the prior	about shopping at the mall.	visually appealing.
		visit.		Advertisements must be
				current and creative.
	Employee	Station employee	Mall's marketing manager	Mall's marketing manager
	actions	customer ambassadors	actively works with	works with advertising
		at informational desks	advertising agency to	agency to plan mall
		near every mall	promote the mall's impact	billboard strategy along
		entrance/exit. Ensure	in the area. Emphasize the	major highways. The mall
		that mall shoppers are	mall's impact in local	also works with retail
		satisfied during and	media (employment, sales).	tenants on co-op
		after their shopping		advertising opportunities.
		trip.		
	Employee	Customer ambassadors	The mall's advertising	The mall's marketing
	support	receiving training on	agency and public relations	manager and advertising
		service quality, active	agency create and	work with a third party
		listening, problem	distribute press release	that specializes in
		resolution, and mall	packets. The mall and	billboard advertising.
		policies.	firms actively work with	
			community organizations	
			and local government	
			officials.	
	Mall design	Attractive help desks	Published articles,	Mall shoppers respond to
		that encourage	advertisements, social	the large-format
		shoppers to provide the	network posts (Facebook,	advertising structures
		customer ambassadors	Instagram, Pinterest,	located on major highways
		with feedback.	Twitter), customer reviews	that direct automobiles
		Customer ambassadors	(TripAdvisor, Google)	and public transportation
		wear a uniform with	should be positive.	to the mall.
		the mall's logo.		

Service	Use raffles to	The mall's social media	Command mall shoppers'
innovation	encourage mall	director is responsible for	attention with new three-
	shoppers to complete	social media, email and	dimensional billboard
	satisfaction, "check in"	mobile marketing, and for	designs and moving parts
	on social media, and	social media monitoring	(e.g., shopping bag with
	use the mall hashtag.	with software.	mall logo).

Table 1: The HPM customer journey map: Pre-service

The diagram depicting the pre-purchase phase of the customer journey map illustrates how touchpoints are placed along the horizontal axis, while strategic actions to be taken in collaboration between different company functions are positioned along the vertical axis. It is also crucial to highlight that in designing the map, managers must adopt a customer-centric approach once again, focusing on the customer's perspective and clearly understanding that not all touchpoints are perceived equally by consumers: they do not all carry the same strategic importance.

Therefore, when preparing the map, it is necessary not only to conduct a general analysis that traces the customer's journey but also to undertake a more detailed study of each contact point, aiming to understand its significance to the customer, if and how they use it, and how the touchpoint can be optimized to enhance the customer experience. Companies can conduct this analysis by integrating more traditional datagathering methods, such as customer surveys on various touchpoints, with other techniques like consumer data analysis.

In this context, gathering customer opinions on touchpoints is crucial to avoid strategic missteps in designing the CJM. It is vital not to create an overly crowded map with touchpoints that customers deem of low or marginal strategic value, as this could unnecessarily increase the map's complexity and limit its strategic usefulness. Therefore, the map should not represent all possible touchpoints but only those deemed most important by customers.

CHAPTER 2: FROM CUSTOMER EXPERIENCE TO RETAIL EXPERIENCE

2.1 Retail experience

In the dynamic and rapidly evolving context of retail, the customer experience has significantly transformed. This transformation extends beyond the simple interaction between buyer and seller, evolving into what we now define as the "Retail Experience." This expanded concept encompasses every aspect of the customer's interaction with the brand, from initial online browsing or entering a physical store, to post-purchase and customer support.

The "Retail Experience" isn't just about the quality of customer service; it's a holistic experience that involves the customer's overall perception of the brand, influenced by elements such as store atmosphere, digital accessibility, personalization, convenience, and efficiency *Alain Debenedetti*, *Déborah Philippe*, *Delphine Dion (2024)*. In this context, details make a difference. Store design, background music, ease of website navigation, and even product packaging, all contribute to creating a memorable experience for the customer.

The introduction of new technologies and adapting to changing consumer needs have pushed retailers to rethink their strategies. The goal is now to create a seamless experience that flows from the online to the offline world, meeting the customer's needs at every touchpoint. In this landscape, personalization and attention to detail have become key to standing out in a crowded market.

The shift from "Customer Experience" to "Retail Experience" reflects a fundamental change in the approach to retail: it's no longer just about selling products, but about building lasting relationships with customers, offering them unforgettable experiences that go beyond the purchase. This customer-centric approach is what now defines success in the modern retail sector.

2.1.1 Features contributing to the immersive retail experience and recent examples: *The relationship between convenience and interest*

The relationship between convenience and interest⁸ within a retail context echoes the connection between fluency and interest found in aesthetic literature (Reber, Schwarz, and Winkielman 2004; Silvia 2008). While fluency entails effortless processing, convenience involves straightforward expenditure. However, aspects such as novelty, ambiguity, and complexity may elicit interest but do not seem to align well with ease, in terms of both processing and expenditure (Berlyne 1974; Silvia 2008). Despite this, there are scenarios where interest and relative ease can successfully coalesce, as seen in the psychological flow experience (Csikszentmihalyi 1997). We argue that a similar case can be made for an immersive in-store experience. Without the intrinsic motivation found in interest, consumers may overlook store features and even fail to process those that require more cognitive resources than would normally be allocated by disinterested shoppers (Peracchio and Meyers-Levy 1997). Interest fosters immersion, whereas inconvenience can disrupt this process and evoke negative emotions such as frustration and irritation. Immersion seems unlikely if a shopping experience is interesting but challenging, or if it is easy but mundane. This latter observation reflects the idea that without interest, attention wanders elsewhere, even under convenient circumstances. However, when interest is paired with a smooth and easy shopping experience, the result is more likely to be an immersive shopping experience, along with customer satisfaction and downstream outcomes such as repeat purchases (Seiders et al. 2005).

Convenient and Interesting Practices in Retail: Which retail practices, then, can be considered convenient or interesting? Some practices might be classified as one or the other, depending on focus. For example, interior design might concentrate on convenient aspects such as practical displays and easily navigable aisles, or on interesting facets like innovative layouts and captivating decorations (Mesher 2010). Similarly, plentiful locations and functional architecture may offer convenience, while more unusual solutions can spark the imagination and invite exploration (Karrholm

⁸ Convenience reduces the cognitive load and simplifies the consumer's decision-making process, interest adds depth and richness to the experience, potentially leading to higher engagement and satisfaction. A successful retail strategy often involves integrating both elements to create a compelling, immersive, and convenient shopping environment that can attract and retain customers.

2012). Some companies choose one focus over the other, while others may feature a mix. For instance, Starbucks has plain, similar stores on seemingly endless street corners, but also some outlets with exceptionally creative architecture and interior designs (Mitra 2021).

Other practices may be inherently convenient or interesting. For example, sensory marketing is utilized to engage consumers' senses (Krishna 2012). While one cannot rule out the possibility that consumers might find such engagement convenient, it appears more likely to evoke interest. Conversely, the option of merely tapping a credit card at the checkout counter is presumably less interesting than it is convenient.

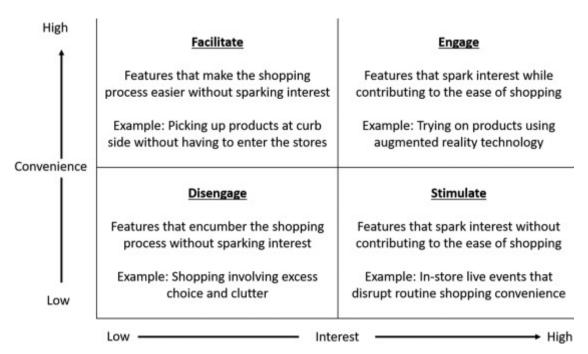


Figure 3: Features contributing to immersive in-store experiences (Reber, Schwarz, and Winkielman 2004; Silvia 2008)

This figure displays the in-store features in terms of convenience and interest, thereby aiding in illustrating how current store attributes can enhance or detract from immersive retail experiences:

- ♦ Disengagement (Low Convenience, Low Interest): Features within the disengagement quadrant rank low in both convenience and interest, including architecture and design that are neither aesthetically pleasing nor conducive to smooth navigation. These attributes may encompass everyday, routine actions perceived by customers more as chores than as enticing components of a shopping experience. For instance, endless aisles with too many options, many of which fail to spark interest, can make shopping laborious and require complex navigation. Clutter in the shopping context can worsen these effects. Sales staff positioned at the entrance or exit, slowing down shoppers with unsolicited offers, can similarly fail to generate excitement. Retailers with too many features of this kind should consider significant changes to increase convenience and evoke interest among their customers.
- ◆ Facilitation (High Convenience, Low Interest): Features that make shopping easier may not be intriguing but provide convenience. Typical examples include:
- ♦ Mobile Payments and Self-Check-out: Mobile payment systems are expanding rapidly, with the number of stores offering this service expected to increase from 46,000 in 2021 to 160,000 by 2027 (Walk-Morris, 2022). These systems, popularized during the COVID-19 pandemic, allow customers to scan and pay for products using their mobile devices, reducing checkout lines. Notable implementations include 7-Eleven and Wegmans, although challenges remain, such as the technology's complexity for some users and operational setbacks (Monteros, 2022).
- ♦ Smart Carts: Enhanced with artificial intelligence, smart carts automatically detect products and offer personalized shopping assistance. They have significantly improved shopping efficiency, as evidenced by Shufersal, where smart cart users increased monthly spending by 8% and reduced checkout times (Press, 2023).
- ♦ Buy Online, Pick Up In Store (BOPS) and Curbside Pickup: These services have become integral to modern retail, allowing customers to order online and pick up in-store or curbside. Retailers like Home Depot and Best Buy have seen

substantial increases in online sales via BOPS, which gained further popularity during the pandemic as a safe shopping alternative (Ström, 2021).

These innovations highlight the retail sector's shift towards more efficient and customer-centric shopping experiences, adapting to new consumer behaviors and technological advancements.

- ♦ Stimulating (Low Convenience, High Interest): Features that pique interest may not necessarily enhance convenience. For instance, a shop hidden in a secret alleyway or located atop a skyscraper may generate interest without being convenient. Similar observations can be made for:
- ♦ Intriguing architecture, interior designs, and atmospheric elements such as music and ambient scent (Ebster 2011; Biswas 2019; Hagtvedt 2022; Spence et al. 2014).
- ♦ Art displays: Artworks are incorporated into retail spaces in various forms, ranging from family-owned shops with a few scattered paintings by local artists on the walls to full-fledged exhibitions at Gucci or Nordstrom (Wang, Xu, and Zhang 2023). Although artworks tend to evoke interest and enhance the appeal of associated products (Hagtvedt and Patrick 2008), there is little reason to believe they contribute to shopping convenience. Under certain circumstances, artworks can even decrease product appeal, at least for luxury goods, because experiencing art can elicit a sense of self-transcendence, which diminishes the desirability of worldly pursuits such as personal status (Wang et al. 2023). It is not surprising that art does little to increase convenience, as far as art transcends functional concerns (Hagtvedt 2022). Similarly, ambiguity, which tends to be central in artistic expression, is often at odds with marketing communication goals such as ease of understanding (Hagtvedt 2015; Zeki 2001). However, art retains a unique ability to arouse interest, which retailers can leverage to their advantage, whether to draw customers to their location, to prevent them from moving too quickly through the store, or to inspire them to spread word-ofmouth.

♦ In-Store Live Events: Live events are held in stores to build interest and foster a sense of community. Brands can introduce new products or attract new customers while simultaneously strengthening loyalty among existing ones. For instance, product tasting is a popular in-store event with immediate and longterm impacts on sales due to category expansion, although its effectiveness depends on store characteristics (Chandukala, Dotson, and Liu 2017). Launch parties are another form of live in-store events conducted by brands. For example, the Beautyque beauty pop-up hosted a week-long launch event for makeup and skincare products in New York, which included consultations with beauticians followed by makeup tutorials and manicures provided by specialists (Scianna 2021). Such events tend to increase foot traffic while educating customers about new products. Although various types of retailers can benefit from these events, they are perhaps particularly well-suited for cosmetics, fashion, and health-related products, given the need for advice and live interaction in such categories. For instance, Chanel's Atelier Beaute pop-up store in 2019 allowed customers to try their new collections, take photos, and receive advice from experts by booking a 20-minute consultation (Mukherjee 2022). When executed well, events like these can enhance a shopping experience and leave a lasting impression. However, they can also be inconvenient; customers attending the events may find them lengthy and exhausting, while customers not interested in the events might find them distracting and become annoyed by the need to navigate through clutter and crowded aisles in the store.

Recent Examples: The temporary event "Chanel City" stood out as a significant example of the evolution of immersive retail experiences, embodying a fusion of luxury, art, and technology. The concept behind "Chanel City" aimed to replicate the dynamics of a cosmopolitan metropolis during the nighttime, offering attendees a multidimensional journey through various installations: from a pulsating music club to an elegant cinema, to spaces dedicated to beauty consultation. This temporary city was imbued with the eight new matte shades of Rouge Allure Velvet Nuit Blanche lipsticks, which inspired the event and whose advertising campaign featured actress Margot Robbie. The adventure begins at the "Chanel Day Store,"

where participants have the opportunity to explore the new lipstick shades. Continuing along the "Velvet Boulevard," visitors can immerse themselves in five distinct settings. A photocall area allows capturing moments in the atmosphere of the Rouge Allure Velvet Nuit Blanche advertising campaign, while the "CinémaLuxor" offers a unique cinematic experience, accompanied by popcorn, where short films dedicated to the lipstick collection and their famous spokesperson are projected. Beyond the visual experience, Chanel City proposes an olfactory and auditory dimension in the jazz club "Le Red Note," where visitors can explore different interpretations of Chanel's most iconic fragrances. Adjacent, "Les Bains Rouges" invites discovery and experimentation of the entire range of Rouge Allure lipsticks to the rhythm of jazz music. The experience is further enriched in the reproduction of a luxury suite, where participants can indulge in personal care through makeup and skincare consultations. The journey concludes in the "Chanel Night Store," a luxurious reinterpretation of the classic convenience store, where the new limited-edition lipsticks are available for purchase alongside a curated selection of Chanel Beauty products. The "Chanel City" event represents a bold and innovative interpretation of temporary retail, demonstrating how the creation of engaging and multisensory brand experiences can significantly enrich the relationship between consumers and the world of luxury beauty. This initiative highlights the potential of pop-up installations in creating unique and memorable moments that reflect the values and aesthetics of a brand, thereby strengthening the emotional bond and loyalty of customers.

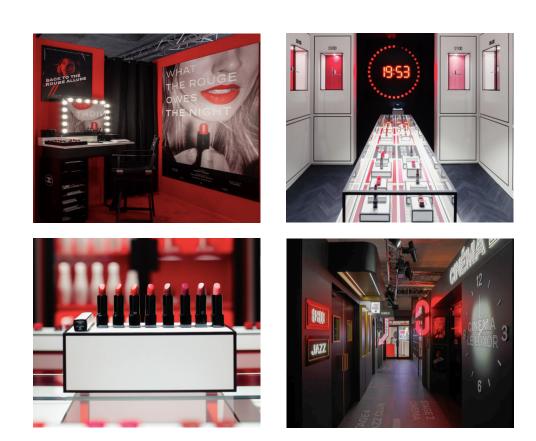


Figure 4: Chanel City pop-up store

Gamification: Similar to live in-store events, the main concept behind gamification, which involves the use of games or puzzles in a non-gaming context, is to enhance consumer interest. In turn, research has found that promotional games in retail locations lead to an increase in consumer spending (Hock, Bagchi, and Anderson 2020). Although gamification is more popular and widespread in online retail, brick-and-mortar stores are also working to integrate it with the aim of engaging customers and boosting brand awareness, loyalty, and sales. For example, customers purchasing beverages from Starbucks earn stars, and once a certain threshold is reached, these stars can be redeemed for other beverages or rewards. Similarly, Toys-R-Us has incorporated games into its physical stores, where customers are required to collect QR codes and scan them in-store to redeem online vouchers (Ekbote 2022). The adoption of gamified solutions is particularly high in the retail sector (28.6% market share, followed by the education sector), with the global gamification market expected

to grow by 27.4% (CAGR) and contributing to an increase in engagement and loyalty of about 30% (Georgiou 2023).

Recent Example:

Among the most innovative initiatives stands out the collaboration between Burberry and Minecraft, which has solidified over the past months. This partnership has led to the creation of a game expansion titled "Burberry: Freedom to Go Beyond," (Conservation International, 2024) developed in conjunction with Blockception. In this downloadable content (DLC) expansion, players can become modern explorers tasked with restoring harmony in four thematic realms, inspired by natural elements. A unique feature allows each player to customize their avatar with 15 different Burberry-designed skins, blending elements of fashion, fantasy, and adventure. Parallel to the digital world of the metaverse, where skins define the appearance of characters, the real world focuses on the capsule collection as a focal point. For the occasion, iconic elements such as the Waterloo trench coat, coats, hoodies, hats, and scarves have been reinterpreted with Minecraft's visual elements. Virtual landscapes and a pixelated design of the Thomas Burberry logo are adorned with floral patterns. Phillip Hennche, Director of Channel Innovation and Marketing at Burberry, shares the motivations behind fashion brands entering the video game arena. The goal is to capture a broad and diverse audience, offering a new platform for narrating brand stories and reaching potential customers in innovative ways. "Video games represent a significant and exciting touchpoint for our customers," states Phillip, emphasizing the importance for Burberry to be present in these environments to remain relevant and influential in the lifestyle of its consumers. Another point of convergence between the world of fashion and that of video games lies in the sharing of common values. Burberry, Hennche emphasizes, chose to collaborate with Minecraft based on a deep affinity of values: both celebrate creativity, individual expression, and adventure. These principles are intrinsic to both the Burberry brand and the Minecraft game. Video game producers also benefit from these collaborations. For instance, the partnership between Moschino and "The Sims 4" introduced a virtual fashion collection into the game, demonstrating how these synergies can enrich the aesthetics and design of video games, making the gaming experience even more compelling. The real winners of these synergies are the players, who through these

collaborations can personalize their avatars with clothing and accessories from luxury brands such as Burberry, Gucci, and Louis Vuitton, in addition to Moschino. Thus, the fusion of fashion and video games leads to a level of immersion and engagement never seen before.





Figure 5: Burberry - Freedom to Go Beyond

- ◆ Engaging (High Convenience, High Interest): In the current typology, engaging experiences are both convenient and interesting. Retailers can create such experiences, for instance, by combining offers, employing innovative technologies or non-traditional store layouts, or building an open, flexible, and scalable digital infrastructure (Mueller 2022). Specific examples of engaging features include functional aesthetics, visual merchandising, ambiance, on-site restaurants, micro-retail solutions, and AR and VR technologies.
- Functional Aesthetics: The aforementioned concept that artworks transcend functional concerns does not imply that aesthetics cannot serve a functional purpose. Furthermore, the perception of well-designed functionality can have its own aesthetic impact, as seen in the flight of an eagle, the gallop of a stallone, or the maneuverability of a car (Hagtvedt 2023). It could be assumed that many consumers, when scrolling through content on an iPhone screen for the first time, experience beauty in this functionality. Similarly, they may appreciate the aesthetics of buildings, interiors, and products, not necessarily despite functionality, but partly due to how that functionality influences them. For example, consumers might find a retail store aesthetically pleasing partly

- because of how easily they can move through it and gain sensory access to the merchandise. As a related example, the interstitial space in product displays leads consumers to perceive the products as aesthetically pleasing (Sevilla and Townsend 2016), and a similar effect might apply to the store itself. In such cases, aesthetic appeal seems to align with both interest and convenience.
- ♦ Visual Merchandising and Ambience: Similarly, the role of visual merchandising as a product-driven display function is closely associated with the display function of the entire store's ambience (Basu, Paul, and Singh 2022). Depending on how they are employed, both can fall within the stimulation or engagement of our scheme; these features tend to be interesting, but can also be convenient. For example, imagery can not only attract attention but also illustrate the use or location of products. Similarly, scents and sounds can evoke interest but can also guide consumers through a store. Physical retail stores often invest heavily in visual merchandising aimed at attracting customers and encouraging them to explore options, thus increasing sales; industry research suggests that 93% of shoppers consider visual impressions in the purchase decision (Chakraborty 2022)

Recent Examples:

Coach New York has created a massive dynamic 3D immersive installation where the brand's mascot, a T-rex, virtually leaps out of a display window with the brand's flagship products in its mouth, and Seed Heritage in Melbourne offers a unique shop-in-shop experience to quickly draw customers' attention to the products offered (*Chakraborty 2022*).

The immersive 3D exhibition in the retail world by Nike, named Nikeland, provides an almost real experience for customers at Nike's House of Innovation in New York City (Domingo 2022).



Figure 6: Nikeland, 3D exhibition

- In-Store Restaurants: An increasing number of retailers are also partnering with restaurants and food outlets; the option to take a break during shopping to enjoy food can be convenient and make the shopping excursion more interesting. For example, Harrods has partnered with renowned chefs to offer upscale dining halls within its premises, providing shoppers with an opportunity to indulge in fine cuisine amidst their shopping journey. Similarly, the Italian coffee chain Lavazza has teamed up with luxury jeweler Bulgari to provide unique coffee tasting experiences inside Bulgari's stores. This synergy not only adds a layer of sophistication but also encourages customers to linger longer, potentially increasing their engagement and purchases. (Bloomberg 2023)
- Micro-retail: In line with previously mentioned observations that endless aisles with excessively large assortments can be detrimental to both convenience and interest (Sorenson 2009), some stores, such as the partnership between Jacquemus and AIMKO, culminating in the creation of the 24/24 micro retail store in Paris (Frame, 2024). This unique store was established to launch the Bambino Long handbag and to feature a selection of items from Jacquemus' Pink 2 capsule collection. For a continuous three-day period, the store offered bags, hats, and sweatshirts available 24/7 through self-service vending machines. The interior of the store was designed with minimalism in mind, prioritizing a straightforward focus on the products and the self-service experience. Despite its small size, the vibrant hot pink space and its novel merchandising approach garnered significant attention on social media, giving the space a lasting presence online.
- Augmented Reality: Both in large and small stores, the use of augmented reality (AR) is continually increasing among retailers to entertain, educate, and assist

- customers in evaluating products, in addition to enhancing pre-purchase and post-purchase experiences (Fritz, Hadi, and Stephen 2022; Tan, Chandukala, and Reddy 2022). For example, Starbucks Reserve allows customers to view the coffee production process (Dahlstrom 2017). Lowe's in-store navigation app provides relevant information while shopping, and BMW dealerships have tablets that allow customers to customize the design and colors of cars (Marr 2021).
- ♦ Virtual Reality: Along with augmented reality, virtual reality (VR) is increasingly being used in physical stores. For instance, Nike customers can scan items in-store to view additional information using augmented reality, or they can step into a virtual world to view the entire Nike supply chain and see where products are manufactured (Marr 2021). Similarly, Toms has incorporated VR into hundreds of their physical stores, to virtually transport customers to Peru. For every \$3 earned, the company donates \$1 to people in the supply chain, and this technology enables customers to virtually experience part of the related impact (Marr 2021).
- Mixed Reality: As the name suggests, mixed reality (MR) combines AR and VR, bringing virtual elements into augmented reality environments, thereby enhancing the consumer experience without the intensity of a full immersion in VR (Byondxr 2022). Although still in the early stages of development, MR helps to integrate physical stores with realistic and engaging online shopping experiences. For example, Bloomingdale's collaboration with Ralph Lauren during Father's Day included a number of large touch screens that consumers could use to browse and customize virtual products and view entire outfits (Morozova 2017). The general interest in these immersive technologies is high; According to a recent survey, 61% of respondents were more likely to buy from a brand that uses such technologies, and 64% of major consumer brands are starting to invest in them (Baar 2020).

Recent examples:

The augmented reality technology company Zero10 is collaborating with Tommy Hilfiger to introduce its virtual try-on clothing experience in three physical Tommy Hilfiger stores across Europe.

Zero10's AR Mirror technology allows shoppers to virtually try on clothes in retail stores using an in-store kiosk. The technology uses 3D body tracking, multiclass segmentation, and fabric simulation to make the clothes appear realistically on the screen.



Figure 7: Tommy Hilfiger Virtual Try-On Experience

An Evolving Typology: In general, retailers could be advised to transition from features in the disengagement quadrant towards features in the other three quadrants, particularly towards the engagement quadrant.

The Significance of Immersive Digital Experiences in Retail:

Retailers rely on access to information. They need data from both the seller's side (e.g., pricing effects, promotional expenses) and the buyer's side (e.g., customer engagement, purchasing behavior). The former data are relatively easy to obtain, but the latter require efforts such as non-intrusively observing and recording in-store behaviors. Fortunately for retailers, new technologies can provide access to new types of data on shopper behavior, for example:

- o AR screens and apps
- o Digital displays and signage
- Electronic price tags

- Innovative payment options
- RFID tags and motion sensors

Allow retailers to collect detailed information about buyers and their in-store behaviors. Considering Figure 4, features in the disengagement quadrant are associated with fewer data sources compared to features in the other quadrants. Features in the engagement quadrant are linked to the largest amount of information thanks to data obtained from sources like AR/VR interfaces. This additional information can help retailers analyze customer behavior and gain insights to improve current immersive experiences and develop new ones for the future. Advances in artificial intelligence (AI) and machine learning (ML) are making it easier to manage and analyze the growing amount of data. There is significant potential for research employing technologies that inform retail decisions ranging from product assortments to store layouts. Examples:

- The North Face has implemented WeatherFX, a predictive analytics program that leverages weather patterns and customer behavior data to guide decisions regarding staffing, products to stock, and cross-channel marketing efforts in various store locations (Mintz 2020). In-store data on shopper movements (Ewen 2022) and interactions with products in various categories (Burke, Chandukala, Christensen 2023) can also help retailers design efficient store layouts.
- Farfetch's Store of the Future connects online and offline data to enhance the instore experience. In its London store, Farfetch uses its online data in-store to link clothing racks, touch-screen enhanced mirrors, and access stations to allow customers to try alternative products and payment methods without leaving the dressing room, thus merging online shopping with the boutique experience (Moore 2020). In summary, not only are immersive in-store features providing new data sources, but developments in data and analytics are also generating new insights into how to provide an immersive shopping experience. If managed correctly, the self-reinforcing cycle can benefit both retailers and consumers.

2.2 Augmented and Virtual Reality: Transforming the Retail Sector with Immersive Technology

The retail sector has been experiencing a continuous and steady digital transformation for years, driven by consumers' increasing demand for dynamic, personalized, and engaging shopping experiences. In this context, immersive technology emerges as one of the tools with the greatest potential, offering new opportunities to revolutionize the interaction between buyers and products (*Fingent, 2024*).

Thanks to its ability to overlay interactive virtual layers onto physical reality, combining intuitiveness and scalability determined by strong system integration, Unity is the framework that has been most employed by companies across various sectors to enhance customer experiences, leading the growth of the augmented reality market which is expected to continue increasing its value, surpassing 88 billion dollars by 2024, (DataProt, 2024)

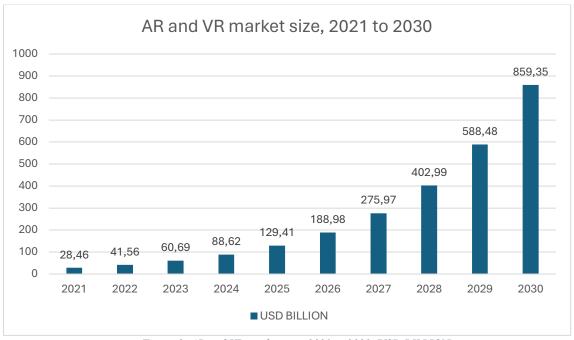


Figure 8: AR and VR market size, 2021 to 2030 (USD BILLION)

Immersive Technology and New Realities: Augmented, Virtual, and Mixed:

Immersive technology, encompassing augmented reality (AR), virtual reality (VR), and mixed reality (MR), is redefining customer experiences by enabling brands to enhance interactions with products before, during, and after purchase.

The crucial difference lies in the fact that virtual reality "replaces" the real world by immersing the user in a completely virtual environment through specific devices, whereas augmented reality "superimposes" 3D models onto the camera feed. The third technology, mixed reality (MR), combines the features of both to overlay digital elements within a real environment for interactive experiences.

Among these, augmented reality is seen as the most accessible technology in the immersive landscape, as it can be experienced on various commonly used devices. It's projected that by 2024, approximately 110 million users will regularly use augmented reality technologies, with 70 million engaging in virtual reality (*Statista*, 2024).

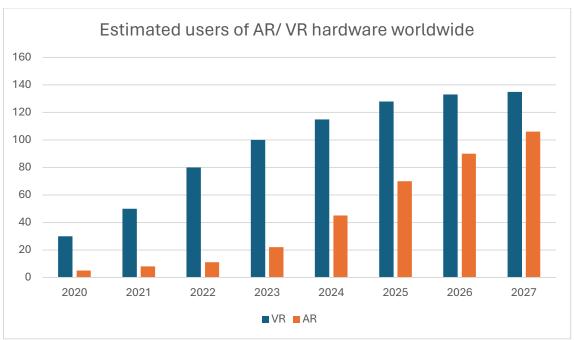


Figure 9: Estimated users of AR/VR hardware worldwide

Immersivity in Retail as an Engagement and Loyalty Lever:

The adoption of immersive technology in the retail industry facilitates the creation of engaging and interactive experiences, where users can interact with virtual objects as if they were real, thereby positively impacting consumer loyalty to the brand.

64% of consumers consider it a strong lever for loyalty, as it encourages repeating the experience (while 57% of users are more inclined to make a purchase if the experience is enhanced by AR solutions).

Main Trends and Opportunities in the Retail Sector

Augmented reality is already demonstrating its potential across various key areas within the retail sector.

The use of immersive technology represents the opportunity to reinvent the shopping experience and create added value for customers, meeting their needs and especially those of the younger audience, considering that 90% of Generation Z shows more interest in technology-supported shopping. However, to fully exploit the potential of these types of tools, it is essential that brands seize the open opportunities and integrate them effectively and consistently into their business strategies. Only by doing so will they be able to differentiate themselves from the competition, offering memorable shopping experiences and deeper connections with customers.

2.2.1 AR areas of implementations in the Retail Sector

Augmented reality is already demonstrating its potential in various key areas of the retail sector:

The swift progress of augmented reality (AR) technology has paved the way for an exciting future in the retail industry. In essence, the way we shop is undergoing a transformational shift. By embracing AR and using it to enhance the customer experience, retailers can stand out in a crowded marketplace, drive sales, and build brand loyalty. Now is an ideal time to implement AR technology and take advantage of the novelty factor it holds in the eyes of customers. Consider these facts:

- o Businesses that offer branded AR experiences are 41% more likely to capture the attention of consumers than those that do not provide such experiences.
- A significant majority, 66% of individuals, express their interest in utilizing AR technology to aid them while shopping.

 By 2025, 76% of consumers anticipate using AR as a practical tool in their daily lives.

AR is already enhancing the retail customer experience, in areas ranging from product visualization, virtual try-ons, in-store shopping, displays, and brand campaigns (*BoF*, 2018)

♦ "Virtual try on" experience

By using AR, consumers can virtually try on products and see how they look on themselves or in their surroundings in real-time. This feature has been particularly beneficial for products like makeup and clothing, as it allows shoppers to visualize how they will look or fit before making a purchase. Consumers can experiment with different products and styles without the need to physically try them.

Research indicates that the use of AR in shopping can improve the perceived informative nature and enjoyment of the shopping experience. By using AR, consumers can better understand the product features, size, and fit, which can make the shopping experience more enjoyable and memorable.

♦ Gamification of in-store experience

It could be argued that, at present, AR is predominantly employed for entertainment purposes. In fact, the success of the Pokémon Go AR game back played a significant role in popularizing the technology and its applications. Given this, it's natural to wonder what would transpire if businesses incorporated AR gaming elements to augment the in-store customer experience. Younger consumers, who are familiar with the gamified AR concept from popular mobile games, will intuitively understand how to interact with the AR experience. For that treason, integrating AR gaming elements into the retail shopping experience is a brilliant move that brings together two seemingly distinct worlds.

♦ Virtual navigation and in-store displays

AR has the capability to inject vitality into certain stagnant aspects of the conventional in-store shopping experience. For instance, in-store digital displays can be seamlessly integrated into the physical surroundings, enabling customers to engage with products in novel and thrilling ways, thus enhancing the shopping experience and facilitating a better comprehension of the products. Customers can simply hold up their mobile phone in front of an item, and the AR app will immediately display product details, assembly instructions, provenance history, and other relevant information to the purchase. Furthermore, augmented reality possesses the potential to significantly revolutionize the way we navigate through stores. It's no secret that locating particular items within a physical store can be a tedious and exasperating process. By incorporating AR, customers can now be directed through the store in a more effective and enjoyable manner.

♦ Immersive Personalization

Augmented Reality (AR) offers interactive product customization opportunities. Customers can view high-quality 3D renderings of the product, modify its color, design, or other attributes in real-time, making their engagement more active.

In summary, AR technology holds immense potential to revolutionize the retail landscape by offering engaging, personalized experiences that cater to evolving consumer preferences. Retailers that embrace AR stand to gain a competitive edge in an increasingly crowded marketplace.

2.2.2 Key Tools for Implementing AR in Retail

Augmented Reality (AR) stands as a groundbreaking, interactive technology that integrates digital real-time 3D (RT3D) imagery into a user's field of vision (FoV), revolutionizing how we interact with our surroundings. This integration occurs through various methods (*Researchgate*, 2017)

Mobile AR: This is perhaps the most widespread application of AR, allowing
users to experience augmented reality directly through their smartphones. This
approach enables digital elements to blend seamlessly with the real world,

- facilitated by technologies like planing, LiDAR, and hand and eye tracking, enhancing user interaction and bridging the gap between physical and virtual environments. Notable platforms supporting mobile AR include Meta's Spark, Google's ARCore, and Apple's ARKit (Danielsson et al., 2020).
- AR Smart Glasses: Beyond mobile devices, AR can be experienced through smart glasses, offering a more hands-free, immersive experience. Although generally costlier than mobile AR, smart glasses provide precise applications and are being adopted in sectors such as manufacturing, retail, and healthcare for tasks like file sharing, video conferencing, infrastructure repair, and even medical procedures. Key players in this field include Xreal, RealWear, ThirdEye, Magic Leap, and Lenovo. (Danielsson et al., 2020).
- WebAR: Operating similarly to mobile AR, WebAR bypasses the need for standalone apps, instead leveraging the mobile phone's browser to deliver AR experiences. This approach makes AR as accessible as browsing the internet, without the need for additional downloads or applications.

In the context of retail, mobile AR emerges as the most applicable technology, offering an enhanced shopping experience without the necessity for specialized hardware. Meanwhile, WebAR opens the door for universal access, allowing virtually anyone with a smartphone to engage in AR-powered retail environments, eliminating the barrier of proprietary AR devices.

2.2.3 Exemplary brands at the Forefront of AR innovation

♦ BURBERRY: Enhancing Brand Experience Through Augmented Reality
Burberry stands out in the fashion sector for its enthusiastic adoption of
augmented reality, integrating it across various online platforms and
continuously exploring its potential in worldwide marketing efforts.
Burberry has reported that customers who use AR are more likely to make a
purchase. In addition to driving sales, AR has also helped Burberry to reach a
wider audience. By offering a more immersive and engaging online shopping

experience, Burberry can attract customers who may not be able to visit its physical stores.

Burberry innovative partnership with Google: This partnership has transformed the in-store shopping experience into a virtual format accessible through online users' devices. For instance, customers searching for the Black TB bag and Arthur Check Sneaker on Google had the opportunity to explore these items in a 3D format.

Previously, Burberry exclusively showcased 3D images of their products on their website and app. Partnering with Google, however, expanded their reach to a wider audience of potential customers.

Moreover, this approach not only elevated the personalized luxury shopping experience, creating a more seamless connection, but it also enhanced customer satisfaction by setting clear expectations about their purchases.



Figure 10: Burberry brings products to Google search through AR

♦ Burberry's Unique AR Experience at Harrods (2024) In Burberry's new exhibition space at Harrods (2024), the standout feature is the statue of Elpis, which comes to life through an augmented reality (AR) experience. This innovative approach allows visitors to interact with a digital version of the statue. Once activated via a dedicated QR code, the statue approaches them, leaving behind a trail of moving statue replicas. This immersive experience not only encourages participants to capture the event through photos or videos but also demonstrates Burberry's strong commitment to incorporating augmented reality to enrich the luxury shopping experience. This technological element is intimately connected to the overall design of the space, which pays tribute to the craftsmanship and inspiration behind the Olympia bag. The design reflects a fusion between classical and modern, with flowing curves and statues that recall ancient Greece, reimagined for contemporary times. These ancient forms and symbols merge with technological innovation to create an atmosphere that mirrors the harmonious shape of the Olympia bag, thus linking artistic heritage with digital advancement. The interaction between these aesthetic and technological elements emphasizes Burberry's vision of combining tradition and innovation to offer an extraordinary and unforgettable customer experience.



Figure 11: Burberry AR - From Olympia Bag to Elpis

♦ LOUIS VUITTON (2021)- Augmented Reality Revolution:

Zoom with Friends in AR Virtual AR Siege - Vendôme Square, Paris in an innovative blend of style and technology, Louis Vuitton has launched an augmented reality experience through its official app, to anticipate the LV SS2021 transforming its flagship Paris store into a dynamic stage. The 'Zoooom with Friends' campaign comes to life in an extraordinary way: vibrant animated characters climb the building's facades, reaching the roof for a spectacular musical performance.

Thanks to the Louis Vuitton app, customers outside the store can use their phones to unveil a surprising scene: the colorful creatures from the 'Zoooom with Friends' campaign make their appearance, emerging from the windows, scaling the walls, and taking over the roof. There, they begin to play the catchy musical notes of Sa-Ra. This immersive experience allows users to capture and share this unique event directly from the app.



Figure 12:Louis Vuitton AR Experience at Vendôme

ZARA (2024)- Augmented Reality App to be used within its stores, alongside outfit displays and windows, as well as on AR-compatible packaging and promotional materials.

In this campaign, Zara chose a radical change by replacing its traditional mannequins with augmented reality versions of real fashion models. With the Zara AR app, available for iOS and Android, customers both inside and outside the stores could activate AR content.

This initiative allowed customers to view on their smartphone screens figures of well-known international models, such as Lea Julian and Fran Summers, posing, walking, and talking in short sequences of 7 to 12 seconds. There were twelve different scenes available, created using 68 cameras in a 170 square meter stage area, one of the largest for this type of shooting.

The campaign stood out for its originality: during this period, the windows were completely bare, devoid of mannequins or clothing, creating a sense of mystery and encouraging passersby to download Zara's AR app to uncover the augmented experiences, watching models showcasing Zara's latest Studio collection in motion.

To facilitate access to the app, Zara provided dedicated Wi-Fi networks in its branches, easily scannable QR codes, and made the app also available through zara.com. After viewing the AR contents, users could proceed to purchase the outfits shown directly from the app or in the store. Additionally, online shoppers had the opportunity to point their smartphones at the received packages to enjoy an AR experience showing the purchased items worn by animated miniature figures on the packaging.

During the campaign, Zara experienced a 9% increase in online sales and a 17% increase in the average order value. This significant ROI was attributed to the seamless integration of AR technology, which enhanced the customer experience and strengthened Zara's brand image. The campaign also led to a 24% increase in social media engagement, demonstrating the viral nature of AR experiences. (Hyper Foundry, 2024)



Figure 13: Shopping in Zara using AR

◆ THE NORTH FACE X GUCCI (2020): Unveiling Augmented Reality in Milan at Via Montenapoleone:

Milan welcomes an innovative encounter between fashion and augmented reality with the arrival of The North Face x Gucci collection at the new Gucci Pin ⁹ in the iconic Via Montenapoleone.

In this unique Gucci Pin, the fusion of The North Face x Gucci unveils an augmented reality journey set against the backdrop of a meticulously designed

⁹ The Gucci Pins are the brand's distinctive temporary pop-up stores designed to offer immersive experiences that seamlessly integrate the Maison's latest collections with cutting-edge technology.

space that includes trunks and spotlights mimicking a celestial sky, centered around a geodesic tent. This setting is not just a nod to adventure but a gateway to a digital realm.

Visitors will engage with interactive digital experiences that extend the narrative of the collection through an adventure trail. This trail is brought to life by QR codes that, once scanned, unlock the ambient sounds of nature in Spatial Sound, enhancing the physical experience with an auditory layer of augmented reality. Further bridging the gap between the tangible and the digital, the Milanese Gucci Pin becomes a beacon for augmented reality exploration by hosting a Gucci PokéStop. This collaboration with Niantic, the augmented reality powerhouse behind Pokémon Go, propels the collection into the expansive universe of Pokémon Go. It encourages the community of gamers to merge their digital quests with physical exploration. By visiting the Gucci PokéStops, users can acquire virtual wearable items from The North Face x Gucci collection, blending style with virtual adventure in the heart of Milan.



Figure 14: The North Face x Gucci collection lands in the virtual universe of Pokémon Go

◆ NIKE (2023):

Nike, collaborating with the advertising production firm Unit9, launched immersive fitting rooms in its Paris and London outlets. This innovative approach utilizes advanced mirrors that engage consumers in breathing and movement exercises, effectively showcasing the fit and functionality of the clothing. Following this engaging interaction, customers are provided with valuable feedback regarding the ideal fit of the product and tailored sizing recommendations.

This virtual fitting room is strategically designed to decrease the frequency of clothing returns by enabling shoppers to virtually try on garments and obtain personalized advice before completing their purchase. The initiative not only aims to streamline the shopping process but also to build brand loyalty and encourage word-of-mouth by offering a memorable and unique retail experience. While many of these efforts are experimental or set up as temporary installations, they signal a promising direction for the future of fitting rooms. The integration of sophisticated technologies is poised to significantly elevate the consumer experience, making physical stores more appealing and encouraging repeat visits.



Figure 15: Nike immersive fitting room

2.3 WeChat: Elevating the Retail Experience

WeChat establishes itself as the leading social platform in China, offering a wide range of communication services optimized for mobile devices. Its growth trajectory has been impressive from the start, going from 50 million users in its first year to 1.24 billion active monthly users in 2021 (*Statista, 2024*). WeChat's popularity spans several generations, with a predominance of users between 18 and 25 years old, accounting for 45.4% of the total. The percentage falls to 40.8% in the 26-35 age group and decreases to 1.4% among users aged 51-60. WeChat stands out for its dynamic and multicontent nature, incorporating features of various apps into a single environment:

- Chat: An instant messaging service that shares many similarities with WhatsApp.
- Social Network: A social networking system where users can post comments and share multimedia files through the "Moments" feature.

- Mini-program: Launched in 2017, these programs function as lightweight apps integrated with WeChat's Wallet service, eliminating the need for separate downloads.
- Wallet: An electronic payment service, known as WeChat Pay, used for financial transactions within the app.

WeChat represents a unique phenomenon in the digital landscape. With a 30% share of the daily phone usage time by Chinese people, it accounts for about 900 million hours of use daily out of a total of 3.1 billion hours of smartphone use. This places it well above other applications, such as Tencent and Alibaba, demonstrating its central role in Chinese digital life

2.3.1 The Potential of WeChat for Brands

Six features make WeChat a strategic platform for marketing in China, (Sandel et al., 2019):

- Official Account (OA): For brands, starting on WeChat means creating an OA to personalize their presence, reaching a wide audience, and enhancing brand awareness. They function like Facebook pages, offering content to followers through push notifications, replacing traditional mailing lists in a context where email is less used.
- Live Streaming: WeChat integrated live streaming in 2020, allowing Official Accounts to connect in real time with the audience, increasing trust, and encouraging immediate purchases with features like "See Now Buy Now."
- O2O (Online to Offline) Strategies: WeChat facilitates the connection between online experiences and physical stores, as demonstrated by Burberry's Social Retail Store in Shenzhen, which perfectly integrates the physical environment with WeChat for a unique shopping experience (Kar et al., 2023).
- WeChat Channels: Launched in 2020, they are a space dedicated to short videos similar to Douyin (Chinese TikTok), where users, influencers, and brands can post content, visible even outside their network of contacts, reflecting the popularity of short videos in China.
- H5 Mini-site: Offers a platform for creating interactive HTML5 pages,
 promoting marketing campaigns, and enabling effective data collection. These

- pages are quick to develop and easy to share, ideal for increasing brand awareness.
- Mini-Programs: Integrated into WeChat's ecosystem, they offer various services such as augmented reality, games, live streaming, and e-commerce. Accessible without downloads, they enhance the user experience and support brand visibility.

Therefore, for brands, WeChat becomes an essential tool for entering the Chinese market. The platform allows brands to create mini-programs where they can showcase and sell their products directly to users. This feature makes WeChat not just a communication channel but also a powerful sales and marketing tool.

The case of Burberry illustrates the success that brands can achieve on WeChat. In 2017, Burberry experienced a 4% increase in global sales, with a significant contribution from the Chinese market, after incorporating WeChat into its strategy. Analyst Ken Odeluga from City Index highlighted how Burberry's adoption of WeChat represented a winning move, setting it apart from other luxury brands.

2.3.2 WeChat Mini-Programs and AR: Revolutionizing Digital Engagement

Among the digital technological innovations most widely adopted by brands in China, augmented reality (AR) stands out significantly. This technology enriches the consumer's physical experience, adding value to the product and the offered experience. AR is applied in various fields:

Creation of branded filters for social platforms like Douyin.

The ability to test products in a completely virtual manner.

QR codes that can be scanned to reveal exclusive content.

The aim is to create a seamless connection between the physical and digital spaces, immersing the consumer in a unique and multisensory experience.

Brands Integrating AR in WeChat Mini Programs:

♦ Burberry is certainly a pioneering brand in this field. Together with Tencent, in Shenzhen, it has created the first social retail store, a place where physical reality meets the world of social media. By scanning codes in the store, consumers access WeChat Mini Programs filled with exclusive content designed to enrich the user experience, which can then be shared with their circle of friends. For instance, it is possible to admire a completely digital sculpture through an interactive window, discover the history and curiosities of clothing items and materials used, and much more.

WeChat Mini-Programs Boost Consumer Experience and Brand Loyalty:

Tencent's continuous technological advancements have been focused on delivering superior products and services for Burberry and its clientele. Through its collaboration with Burberry, Tencent aims to enhance the luxury retail sector, enrich people's lives, and foster sustainable growth along with maximizing social value. In partnership with Tencent, Burberry has introduced an innovative concept that is set to transform luxury retail expectations.

The Burberry social retail store in Shenzhen serves as:

- A hub of discovery, bridging the online and physical realms while rewarding customers for their exploration.
- o A shift in how the brand engages with its customers.

The Mini-Program acts as a digital aide, enhancing the shopping experience in the store, be it physically or digitally. Through this program, customers are empowered to:

- o Engage with features like store tours
- Gain insights about products

Arrange in-store appointments, event attendance, and make table reservations at Thomas's Cafe.

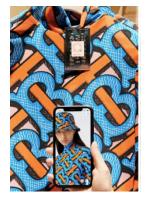








Figure 16: Burberry's social retail in Shenzhen

♦ Pomellato has developed a WeChat mini-program which utilizes AR technology to enable users to virtually try on rings by scanning their hand.



Figure 17: Pomellato's WeChat MiniProgram Virtual-Try-On

2.4 Future perspectives

The Horizon of Retail: A Glimpse into the Future with AR

Imagine stepping into a retail store where the fusion of Augmented Reality (AR) with elements like digital displays, virtual try-ons, and seamless navigation morphs your shopping into an adventure that rivals scenes from a sci-fi saga. This isn't just fantasy; it's the imminent future of retail, where immersive experiences are set to become everyday reality. The stores of tomorrow promise a world where making informed purchases and reveling in an elevated shopping journey becomes the standard (Research gate, 2024).

The AR Revolution Beckons:

Far from being just a momentary trend, AR is on the cusp of redefining retail engagement. It offers a vista of possibilities, from deepening customer interaction to delivering tailor-made product suggestions. With AR, retailers have the power to forge shopping environments that are not only more captivating and interactive but also finely attuned to individual customer desires.

As AR and VR technologies dismantle the old paradigms of interaction with our environment, the retail sector stands at the forefront of this digital upheaval. The moment is ripe for industry leaders and brands to reconceptualize retail, propelling these innovative, immersive shopping experiences into a new era.

Beyond Visual Experimentation:

Today, AR's magic is largely visual, allowing customers to experiment with products in novel ways. Yet, envisioning its future reveals no boundaries to its application. Picture an AR experience that can invoke not just sight but smell, transforming how we connect with products on an even deeper, multisensory level. The potential for AR to become even more captivating and immersive, thereby enriching the customer's purchase journey, is not just fascinating—it's within reach (*Research gate*, 2024).

CHAPTER 3: EXPERIMENTAL RESEARCH

3.1 Research question, Hypotheses and Conceptual Framework

This chapter constitutes the core of the thesis, outlining the focal point of the conducted experimental investigation. Following a preliminary theoretical exploration and a detailed analysis of augmented reality applications within the retail context, this study aims to delve deeply into the dynamics between consumers and the implementation of AR technology in commercial environments:

"How does the integration of augmented reality technology in retail environments impact consumers' emotional responses, consequently influencing future purchase behavior, word of mouth, and brand loyalty in the retail sector?".

Based on this question, there are three main hypotheses:

H1: Consumers who have previously interacted with AR technology and perceive it as easy to use are more likely to utilize it during in-store shopping experiences, thereby enhancing their overall purchasing experience.

H2: Shopping experiences enriched by augmented reality (virtual try-on, gamification of in-store experience, virtual navigation and in-store displays, immersive personalization) evoke positive emotions in consumers, improving their overall sentiment towards the brand.

H3: Positive AR experiences in retail significantly increase the likelihood that consumers will make future purchases from the same store, recommend it to friends, and remain loyal customers.

Conceptual framework:

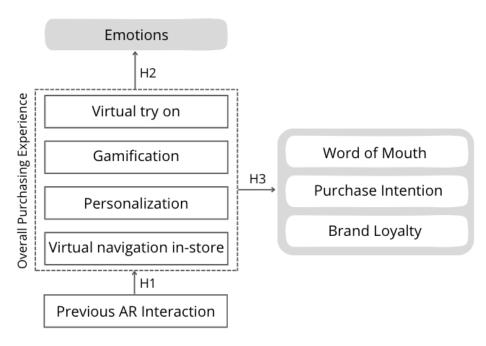


Figure 18: Conceptual Framework

The diagram illustrates the three hypotheses (H1, H2, H3) which connect the independent variables (Virtual Try-On, Gamification, Personalization, Virtual Navigation In-Store, and Previous AR Interaction) with each of the dependent variables (Word of Mouth, Purchase Intention, and Brand Loyalty).

3.1.1 Methodology and Study

The present experimental study employs a conclusive causal between-subjects (*Andrew F. Hayes*) research design. The experiment's outcomes are represented by responses to a questionnaire obtained through an anonymous survey administered in Italy during the month of April 2024, using the Qualtrics XM platform. Survey participants were selected using a non-probabilistic sampling methodology. Specifically, a convenience

sampling method ¹⁰ was chosen to exploit both the ease and speed of accessing and selecting elements of the sample population. Indeed, this technique entails no economic cost and proves advantageous in terms of both rapid data collection and a high response rate (*Andrew F. Hayes*). Considering the target sample, it was decided to include respondents of all age groups, gathering data from both male and female individuals, as demographic variables were not expected to significantly influence the experiment's results (*Andrew F. Hayes*).

3.1.2 Participants and Sampling Procedures

The survey was distributed to 250 individuals, of whom 243 respondents fully participated in the experimental study, providing complete and comprehensive answers to all questions within the questionnaire. The remaining 7 incomplete responses were first identified and then excluded from the dataset during the data cleaning process. Respondents were contacted through an anonymous link generated by the QualtricsXM platform and distributed through instant messaging apps and social media networks as the main distribution channels (Instagram, WhatsApp, Prolific).

The survey's sample population primarily comprised graduating students and newly employed individuals located in various cities across Europe. Therefore, based on this assumption, the average age of respondents was found to be 26.78 years, although the age range varied between 18 and 64 years.

Regarding the gender of the interviewed subjects, the predominant gender was female, accounting for 58.7%, while the male gender accounted for 40.9%. The remaining 0.4% of respondents preferred not to identify with a specific gender.

3.1.3 Data Collection and Questionnaire Composition

To conduct the experimental study, it was necessary to develop a questionnaire consisting of 20 questions, 18 of which were specific and 2 were demographic.

¹⁰ The convenience sampling method is a type of non-probability sampling technique where the sample is taken from a group of people easy to contact or to reach. It involves selecting participants because they are conveniently available to participate in the study. This approach is often used when simplicity and speed are more desirable than accuracy and generalizability in terms of research objectives.

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As just mentioned, the data were collected through a questionnaire divided into 3 main parts:

- At the beginning of the questionnaire, a brief introduction was provided, along
 with an explanation of the academic purpose of the experimental research.
 Additionally, after including the university credentials, complete and total
 respect for privacy norms regarding the anonymity policy concerning data
 collection and management was ensured.
- 2. The second part of the survey consisted of a block dedicated to demographic questions, where respondents were asked about their gender and age.
- 3. The third part of the survey introduced respondents to the observation of 4 different scenarios related to Augmented Reality technologies. This section of the questionnaire comprised 14 questions: the first 4 related to perceptions arising from individual images, another 7 concerning the dependent variables of purchase intention, word of mouth, and the last 3 regarding brand loyalty. All questions were evaluated using a Likert scale based on a 9-point rating system.

SCALE	ITEM	CRONBACH ALPHA	BIBLIOGRAPHY
AR previous interaction	- I have already had an interaction with AR technology It will be easy for me to become skilled in using this AR technology I would find this AR technology easy to use in the store	0,92	Inman and Nikolova (2017)
Virtual Try On	- How much did/ would you like the experience of "virtual try-on" of products through AR?		
Personalization	- How enjoyable was/ would be to receive personalized product recommendations in-store?	0,98	Chun, Diehl and MacInnis 2017
Gamification	- How fun was/ would be the experience of gamification in-store?		
Virtual Navigation in Store	- How good was/ would be the experience of "Virtual navigation and in-store displays" through AR?		
Word of Mouth	- I have positive things to say about the experience after using AR technology I will recommend this experience to others after a satisfying AR experience How likely are you to tell friends and acquaintances about your positive AR experience?	0,84	Cheema and Kaikati (2010)
Future Purchase	I am inclined to buy products experienced through AR anytime I shop at this store. I will purchase products experienced through AR on my next visit to this store. I anticipate buying products experienced through AR frequently over the next few months. Compared to competing stores, I am more likely to purchase from this store after a positive AR experience.	0,87 Heinberg, Ozkaya, and Tax	
Brand Loyalty	- I consider myself a loyal customer of brands that offer augmented reality experiences I prefer shopping with brands that integrate augmented reality compared to any other available alternatives I believe that brands that use augmented reality are the best choice compared to other brands.		Perhaps, Wolter et al. (2017)

3.2 Experiment Results

The data collected through the questionnaire provided by the survey generated on Qualtrics XM were exported to the statistical software SPSS (Statistical Package for Social Science) for analysis.

Initially, it was decided to perform three factor analyses to examine and validate the items of the scales used in the conceptual research model to describe the three dependent variables (Word Of Mouth; Purchase Intention; Brand Loyalty). Specifically, principal component analysis was conducted as the extraction method, applying Varimax rotation technique. To decide how many factors to extract, the table of explained total variance was observed, ensuring that, according to Kaiser's rule, Eigenvalues were greater than 1 and that the cumulative variance in % was above 60%. Particularly, the factor analysis consists of two tests, the KMO and Bartlett's: The Kaiser-Meyer-Olkin (KMO) test was executed to measure the sampling adequacy based on the scale that was adopted. In all cases, the adequacy level was found to be more than adequate/good.

Subsequently, Bartlett's test of sphericity, which verifies the success of the factor analysis output, was conducted, yielding a statistically significant p-value in all cases (p-value $< \alpha = 0.05$)

Dependent	KMO	Bartlett Test (p-
Variables		value < 0.05)
Y1= WOM	0.749	0.001 < 0.05
Y2= Purchase	0.858	0.001 < 0.05
Intention		
Y3= Brand Loyalty	0.743	0.001 < 0.05

Figure 19: Factorial Analysis

3.2.1 Hypotheses Results

After validating all the scales, a reliability test was conducted to assess the reliability level of the scales under consideration. Specifically, the Cronbach's alpha value was observed to ensure it was above 60%. For the scale related to the first dependent variable (Purchase Intention), a value of 0.94% was found, while for the scale of the second dependent variable (Word of Mouth), a value of 0.89% was recorded. Regarding the scale of the third dependent variable (Brand Loyalty), a value of 0.92% emerged. Consequently, all the scales proved to be reliable.

Dependent Variables	Cronbach Alpha
Y1= WOM	0.901
Y2= Purchase Intention	0.944
Y3= Brand Loyalty	0.926

Figure 20: Reliability Analysis

After conducting both factorial analyses and reliability tests, the main hypotheses of the conceptual research model were examined to confirm or reject their statistical significance and, consequently, their relative success. To verify the statistical significance of all independent variables (Virtual Try-On, Gamification, Personalization, Virtual Navigation in Store) concerning the three dependent variables (Word of Mouth, Purchase Intention, Brand Loyalty), three multiple linear regression analyses were conducted using SPSS.

Multiple Linear Regression Analysis: dv1 (WOM)
 Regarding the first regression analysis with Word of Mouth as the dependent variable, upon observing the SPSS output, an adjusted R-squared of 0.515 was

noted. The use of adjusted R-squared is due to the fact that we have a multiple regression, thus multiple independent variables. Therefore, the coefficient of determination of the first regression model determined that 51.5% of the variance in the dependent variable (WOM) is explained by the independent variables included in the multiple linear regression.

Additionally, upon reviewing the ANOVA table, a p-value for the F-test of 0.001 was observed, which was statistically significant, confirming the success of the regression. Subsequently, from the analysis of the coefficients table, the statistical significance of each independent variable concerning the first dependent variable was determined.

Specifically, as the first step, the Variance Inflation Factor (VIF) column was analyzed, revealing all values below 10, which excluded any issues related to multicollinearity (highly correlated independent variables redundant for the experiment's purposes).

Following that, the p-value column relative to the T-test was observed, with three out of four independent variables being statistically significant.

Specifically, Virtual Try-On obtained a p-value of 0.005 (p-value $< \alpha/2 = 0.025$), Personalization had a p-value of 0.048 (p-value $> \alpha/2 = 0.025$), Gamification had a p-value of 0.001 (p-value $< \alpha/2 = 0.025$), and Virtual Navigation in Store had a p-value of 0.001 (p-value $< \alpha/2 = 0.025$).

Therefore, in light of these results, it was possible to demonstrate a statistically significant effect of Virtual Try-On, Gamification, and Virtual Navigation in Store on Word of Mouth.

Independent	β coefficient	p-value	Hp significance:
variable		compared to	x→wom
		$\alpha/2=0.025$	
X1=Virtual try-on	$\beta 1 = 0.135$	0.005 < 0.025	Yes
X2=Personalization	$\beta 2 = 0.100$	0.048 > 0.025	No
X3=Gamification	$\beta 3 = 0.178$	0.001 < 0.025	Yes
X4=Virtual	$\beta 4 = 0.234$	0.001 < 0.025	Yes
navigation in-store			

Figure 21: Multiple Linear Regression Analysis: dv1 (WOM)

Multiple Linear Regression Analysis: dv2 (Purchase Intention)

Regarding the second regression analysis with Purchase Intention as the dependent variable, upon observing the SPSS output, an adjusted R-squared of 0.469 was noted. Therefore, the coefficient of determination of the second regression model determined that 46.9% of the variance in the dependent variable (Purchase Intention) is explained by the independent variables included in the multiple linear regression.

Additionally, upon reviewing the ANOVA table, a p-value for the F-test of 0.001 was observed, which was statistically significant, confirming the success of the regression. Subsequently, from the analysis of the coefficients table, the statistical significance of each independent variable concerning the second dependent variable was determined.

Specifically, as the first step, the Variance Inflation Factor (VIF) column was analyzed, revealing all values below 10, which excluded any issues related to multicollinearity (highly correlated independent variables redundant for the experiment's purposes).

Following that, the p-value column relative to the T-test was observed, with two out of four independent variables being statistically significant. Specifically, Virtual Try-On obtained a p-value of 0.034 (p-value > $\alpha/2 = 0.025$), Personalization had a p-value of 0.040 (p-value > $\alpha/2 = 0.025$), Gamification had a p-value of 0.003 (p-value < $\alpha/2 = 0.025$), and Virtual Navigation in Store had a p-value of 0.001 (p-value < $\alpha/2 = 0.025$).

Therefore, in light of these results, it was possible to demonstrate a statistically significant effect of Gamification and Virtual Navigation in Store on Purchase Intention.

Independent	β coefficient	p-value	Hp significance:
variable		compared to	X→Purchase
		$\alpha/2=0.025$	Intention
X1=Virtual try-on	$\beta 1 = 0.142$	0.034 > 0.025	No
X2=Personalization	$\beta 2 = 0.147$	0.040 > 0.025	No
X3=Gamification	β3= 0.186	0.003 < 0.025	Yes
X4=Virtual	β4= 0.351	0.001 < 0.025	Yes
navigation in-store			

Figure 22: Multiple Linear Regression Analysis: dv2 (Purchase Intention)

Multiple Linear Regression Analysis: dv3 (Brand Loyalty)

In the third regression analysis with Brand Loyalty as the dependent variable, upon examining the SPSS output, an adjusted R-squared of 0.351 was observed. Thus, the coefficient of determination of the third regression model determined that 35.1% of the variance in the dependent variable (Brand Loyalty) is explained by the independent variables included in the multiple linear regression.

Furthermore, upon reviewing the ANOVA table, a p-value for the F-test of 0.001 was observed, which was statistically significant, confirming the success of the regression. Subsequently, from the analysis of the coefficients table, the statistical significance of each independent variable concerning the third dependent variable was determined.

Specifically, as the first step, the Variance Inflation Factor (VIF) column was analyzed, revealing all values below 10, which excluded any issues related to multicollinearity (highly correlated independent variables redundant for the experiment's purposes).

Following that, the p-value column relative to the T-test was observed, with two out of four independent variables being statistically significant. Specifically, Virtual Try-On obtained a p-value of 0.121 (p-value > $\alpha/2 = 0.025$), Personalization had a p-value of 0.591 (p-value > $\alpha/2 = 0.025$), Gamification had a p-value of 0.001 (p-value < $\alpha/2 = 0.025$), and Virtual Navigation in Store had a p-value of 0.001 (p-value < $\alpha/2 = 0.025$).

Therefore, in light of these results, it was possible to demonstrate a statistically significant effect of Gamification and Virtual Navigation in Store on Brand Loyalty.

Independent	β coefficient	p-value	Hp significance:
variable		compared to	X→Brand
		α/2=0.025	Loyalty
X1=Virtual try-on	$\beta 1 = 0.137$	0.121 > 0.025	No
X2=Personalization	$\beta 2 = 0.051$	0.591 > 0.025	No
X3=Gamification	$\beta 3 = 0.295$	0.001 < 0.025	Yes
X4=Virtual	β4= 0.349	0.001 < 0.025	Yes
navigation in-store			

Figure 23: Multiple Linear Regression Analysis: dv3 (Brand Loyalty)

CHAPTER 4: DISCUSSION AND CONCLUSIONS

The results of this study confirm the validity of all three hypotheses regarding the integration of augmented reality (AR) technology in the retail environment. Firstly, hypothesis H1 is based on the idea that consumers with a positive previous experience with AR technology and who perceive it as easy to use will be more likely to use it during in-store shopping experiences. This hypothesis was validated during the study, as the data showed that consumers who feel comfortable with AR technology and are familiar with its usage are indeed more inclined to adopt it during the shopping experience. This suggests that familiarity and perceived ease of use are crucial factors influencing consumer behavior towards AR applications in retail contexts. This has important practical implications for retailers, as it suggests that investing in the design of intuitive and accessible AR experiences may be crucial to encourage consumer adoption. Creating AR applications that are easy to understand and use can help overcome adoption barriers and overall improve customers' shopping experience. Additionally, capitalizing on existing familiarity with AR technology, such as through awareness campaigns or training programs, can help increase consumer enthusiasm and acceptance.

Furthermore, personalization stands out as a critical component in the augmented reality-enhanced shopping experience. According to the data collected, on a scale from 1 to 9, the satisfaction index for personalization within my reference sample was notably higher compared to other examined features such as virtual try-on, gamification, and virtual in-store navigation. Specifically, personalization scored an average response rating of 7, which is significantly higher than the average rating of 5 observed for the other features. This result underscores the importance of personalization in eliciting positive emotions in consumers during their interactions with AR applications in the retail context. Personalization allows consumers to experience a more engaging and tailored experience that reflects their tastes, preferences, and individual desires. When consumers perceive that a shopping experience has been specially tailored to their

needs, they feel more engaged and valued as individuals. This sense of belonging and consideration helps evoke positive emotions, such as satisfaction and joy, during interaction with the brand. This enhances the overall brand image, encouraging consumers to recommend it and consider future purchases and repeat purchases. Additionally, the implementation of other AR features such as virtual try-on and gamification adds further value to the shopping experience, offering new modes of interaction and engagement. However, it is important to note that, despite these features contributing positively to the overall experience, personalization emerged as the most influential element in generating positive emotions in consumers.

Finally, the results support H3, indicating that positive AR experiences in retail significantly increase the likelihood of future purchases at the same store, as well as recommendations to friends and overall customer loyalty. This highlights the importance of continuous innovation and improvement in AR offerings to sustain consumer interest and loyalty over time. Retailers that successfully integrate AR into their operations benefit from increased customer loyalty and advocacy, thus reinforcing the importance of investing in innovative AR experiences to drive long-term business success.

In conclusion, the results of this study underscore the transformative potential of augmented reality in shaping the future of retail, from enhancing the in-store shopping experience to promoting stronger relationships between consumers and brands and fostering long-term customer loyalty. With the ongoing evolution of AR technology, retailers must remain vigilant in harnessing its capabilities to create engaging and immersive experiences that resonate with today's consumers.

Looking to the future, retailers can approach the encouraging prospects regarding the increasingly central role of augmented reality in the retail sector with optimism.

According to PwC estimates, by 2030, augmented reality is expected to significantly contribute to the global economy, with approximately 13% earmarked for the Retail and Consumer sector, aimed at enhancing consumer experience.

These forecasts clearly reveal that AR technology is not a passing trend but rather a fundamental pillar of the future of retail commerce. The widespread adoption of augmented reality promises to revolutionize the way people shop, enriching in-store interactions and deepening relationships between consumers and brands.

In conclusion, the results of this study and future prospects emphasize the innovative potential of augmented reality in shaping the future of retail. With the constant evolution of AR technology, retailers are called to remain at the forefront, fully leveraging its potential to create engaging and immersive experiences that resonate with today's and tomorrow's consumers.

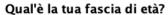
APPENDIX

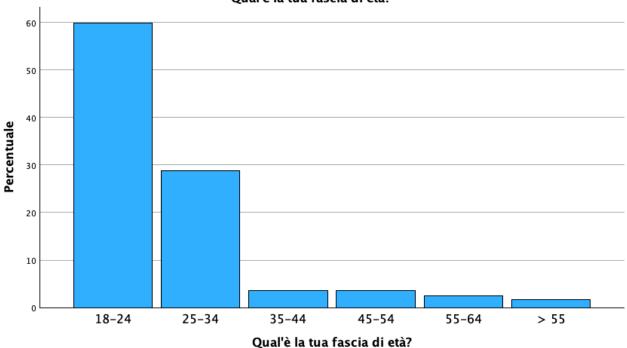
Descriptive Statistics: Age

Qual'è la tua fascia di età?

		Frequenza	Percentuale	Percentuale valida	Percentuale cumulativa
Valido	18-24	148	59.9	59.9	59.9
	25-34	71	28.7	28.7	88.7
	35-44	9	3.6	3.6	92.3
	45-54	9	3.6	3.6	96.0
	55-64	6	2.4	2.4	98.4
	> 55	4	1.6	1.6	100.0
	Totale	247	100.0	100.0	

Mean Age: (21 * 148 + 29.5* 71 + 39.5*9 + 49.5* 9 + 59.5*6 + 64*4) / 247 = 26.78





Descriptive Statistics: Gender

Qual'è il tuo genere?

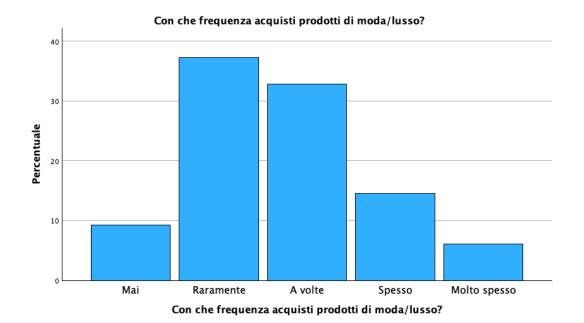
		Frequenza	Percentuale	Percentuale valida	Percentuale cumulativa
Valido	Maschio	101	40.9	40.9	40.9
	Femmina	145	58.7	58.7	99.6
	Preferisco non dirlo	1	.4	.4	100.0
	Totale	247	100.0	100.0	



Descriptive Statistics: Frequency of Fashion/Luxury Product Purchases

Con che frequenza acquisti prodotti di moda/lusso?

		Frequenza	Percentuale	Percentuale valida	Percentuale cumulativa
Valido	Mai	23	9.3	9.3	9.3
	Raramente	92	37.2	37.2	46.6
	A volte	81	32.8	32.8	79.4
	Spesso	36	14.6	14.6	93.9
	Molto spesso	15	6.1	6.1	100.0
	Totale	247	100.0	100.0	



Factorial Analysis dv1(dependent variable 1): WOM

Varianza totale spiegata

Autovalori iniziali			Caricamenti soi	mme dei quadra	ti di estrazione	
Componente	Totale	% di varianza	% cumulativa	Totale	% di varianza	% cumulativa
1	2.506	83.522	83.522	2.506	83.522	83.522
2	.283	9.421	92.943			
3	.212	7.057	100.000			

Metodo di estrazione: Analisi dei componenti principali.

Comunalità

	Iniziale	Estrazione
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Avrei feedback positivi sull'esperienza dopo aver utilizzato la tecnologia AR	1.000	.809
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" - Raccomanderei questa esperienza ad altri dopo un'esperienza AR soddisfacente	1.000	.852
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Quanto è probabile che tu parli ai tuoi amici e conoscenti della tua esperienza AR positiva?	1.000	.844

Metodo di estrazione: Analisi dei componenti principali.

Matrice dei componenti^a

	Componente 1
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" - Avrei feedback positivi sull'esperienza dopo aver utilizzato la tecnologia AR	.899
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" - Raccomanderei questa esperienza ad altri dopo un'esperienza AR soddisfacente	.923
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Quanto è probabile che tu parli ai tuoi amici e conoscenti della tua esperienza AR positiva?	.919

Metodo di estrazione: Analisi dei componenti principali.

a. 1 componenti estratti.

Test di KMO e Bartlett

Misura di Kaiser-Meyer-Olkin di adeguatezza del campionamento.		.749
Test della sfericità di Bartlett	Appross. Chi-quadrato	463.321
	gl	3
	Sign.	<.001

Reliability analysis dv1: WOM

Statistiche di affidabilità

Alpha di Cronbach	Alpha di Cronbach basata su elementi standardizzati	N. di elementi
.899	.901	3

Factorial Analysis dv2(dependent variable 1): Purchase intention

Varianza totale spiegata

Autovalori iniziali		Caricamenti somme dei quadrati di estrazione		ti di estrazione		
Componente	Totale	% di varianza	% cumulativa	Totale	% di varianza	% cumulativa
1	3.429	85.717	85.717	3.429	85.717	85.717
2	.256	6.394	92.111			
3	.196	4.897	97.008			
4	.120	2.992	100.000			

Metodo di estrazione: Analisi dei componenti principali.

Comunalità

	Iniziale	Estrazione
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Sono propenso ad acquistare prodotti sperimentati tramite AR ogni volta che faccio shopping in store	1.000	.864
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Acquisterò prodotti sperimentati tramite AR durante mia prossima visita in store	1.000	.900
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Prevedo di acquistare frequentemente prodotti sperimentati tramite AR nei prossimi mesi	1.000	.861
Su una scala da 1 a 7 dove 1 indica "Per niente probabile" e 7 "Molto probabile" – Dopo un'esperienza positiva con l'AR, sono più propenso ad acquistare in un negozio che offre questa tecnologia rispetto ai concorrenti	1.000	.804

Metodo di estrazione: Analisi dei componenti principali.

Matrice dei componenti^a

ilelici
Componente
1
.930
.948
.928
.897

Metodo di estrazione: Analisi dei componenti principali.

Test di KMO e Bartlett

Misura di Kaiser-Meyer-Olkin di adeguatezza del campionamento.		.858
Test della sfericità di Bartlett	Appross. Chi-quadrato	947.160
	gl	6
Sign.		<.001

Reliability Analysis dv2: Purchase intention

Statistiche di affidabilità

Alpha di Cronbach	Alpha di Cronbach basata su elementi standardizzati	N. di elementi
.944	.944	4

Varianza totale spiegata

		Autovalori inizi	iali	Caricamenti soi	mme dei quadra	ti di estrazione
Componente	Totale	% di varianza	% cumulativa	Totale	% di varianza	% cumulativa
1	2.615	87.152	87.152	2.615	87.152	87.152
2	.251	8.366	95.518			
3	.134	4.482	100.000			

Metodo di estrazione: Analisi dei componenti principali.

Comunalità

	Iniziale	Estrazione
Su una scala da 1 a 9 dove 1 indica "Per niente d'accordo" e 9 "Completamente d'accodo" – Mi considero cliente fedele dei brand che offrono esperienze di realtà aumentata	1.000	.836
Su una scala da 1 a 9 dove 1 indica "Per niente d'accordo" e 9 "Completamente d'accodo" – Preferisco fare acquisti con i brand che integrano la realtà aumentata rispetto a qualsiasi altra alternativa disponibile	1.000	.908
Su una scala da 1 a 9 dove 1 indica "Per niente d'accordo" e 9 "Completamente d'accodo" – Ritengo che i brand che utilizzano la realtà aumentata siano la scelta migliore rispetto agli altri brand	1.000	.870
Metodo di estrazione: Analisi dei componenti principali.		

Matrice dei componentia

Matrice dei componenti		
Componente 1		
.914		
.953		
.933		

Metodo di estrazione: Analisi dei componenti principali.

Test di KMO e Bartlett

Misura di Kaiser-Meyer-Olkin di adeguatezza del campionamento.		.743
Test della sfericità di Bartlett	Appross. Chi-quadrato	592.776
	gl	3
	Sign.	<.001

Reliability Analysis dv3: Brand Loyalty

Statistiche di affidabilità

Alpha di Cronbach	Alpha di Cronbach basata su elementi standardizzati	N. di elementi
.926	.926	3

 $a.\,\,1\,\,componenti\,\,estratti.$

Multiple Linear Regression Analysis: dv1

Riepilogo del modello

Modello	R	R-quadrato	R-quadrato adattato	Errore std. della stima
1	.723 ^a	.523	.515	1.09942

a. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 - Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

ANOVA^a

Mode	llo	Somma dei quadrati	gl	Media quadratica	F	Sign.
1	Regressione	320.140	4	80.035	66.215	<.001 ^b
	Residuo	292.511	242	1.209		
	Totale	612.650	246			

a. Variabile dipendente: WOM

b. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 - Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

Coefficientia

		Coefficienti non standardizzati		Coefficienti standardizzati			Statistiche di	collinearità
Model	llo	В	Errore standard	Beta	t	Sign.	Tolleranza	VIF
1	(Costante)	1.811	.325		5.565	<.001		
	Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?	.135	.047	.164	2.864	.005	.603	1.659
	Q33 – Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?	.100	.050	.117	1.987	.048	.569	1.757
	Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?	.178	.044	.250	4.088	<.001	.527	1.897
	Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?	.234	.044	.337	5.306	<.001	.490	2.041

a. Variabile dipendente: WOM

Riepilogo del modello

Modello	R	R-quadrato	R-quadrato adattato	Errore std. della stima
1	.691 ^a	.477	.469	1.55331

 a. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 - Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

ANOVA^a

Mode	llo	Somma dei quadrati	gl	Media quadratica	F	Sign.
1	Regressione	essione 532.975		133.244	55.224	<.001 ^b
	Residuo	583.890	242	2.413		
	Totale	1116.864	246			

- a. Variabile dipendente: PI
- b. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

Coefficientia

Coefficienti non standardizzati		Coefficienti standardizzati			Statistiche di	i collinearità		
Model	lo	В	Errore standard	Beta	t	Sign.	Tolleranza	VIF
1	(Costante)	437	.460		950	.343		
	Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?	.142	.067	.128	2.137	.034	.603	1.659
	Q33 – Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?	.147	.071	.127	2.067	.040	.569	1.757
	Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?	.186	.062	.193	3.010	.003	.527	1.897
	Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?	.351	.062	.374	5.637	<.001	.490	2.041

a. Variabile dipendente: PI

Multiple Linear Regression Analysis: dv3

Riepilogo del modello

Modello	R	R-quadrato	R-quadrato adattato	Errore std. della stima
1	.602ª	.362	.351	2.06097

a. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 - Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

ANOVA^a

Modell	0	Somma dei quadrati	gl	Media quadratica	F	Sign.
1	Regressione	583.160	583.160 4		34.323	<.001 ^b
	Residuo	1027.921	242	4.248		
	Totale	1611.081	246			

- a. Variabile dipendente: BL
- b. Predittori: (costante), Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?, Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?, Q33 Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?, Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?

Coefficientia

		Coefficienti non standardizzati		Coefficienti standardizzati			Statistiche d	i collinearità
Mode	llo	В	Errore standard	Beta	t	Sign.	Tolleranza	VIF
1	(Costante)	601	.610		986	.325		
	Quanto ti è piaciuta/ piacerebbe l'esperienza del 'virtual try-on' di prodotti tramite AR?	.137	.088	.103	1.557	.121	.603	1.659
	Q33 – Quanto è stato/ sarebbe piacevole ricevere un' esperienza personalizzata?	.051	.094	.037	.538	.591	.569	1.757
	Quanto è stato/ sarebbe divertente l'esperienza di gamification in store?	.295	.082	.255	3.600	<.001	.527	1.897
	Quanto è stata/ sarebbe utile l'esperienza di 'navigazione virtuale e display in-store' tramite AR?	.349	.083	.310	4.220	<.001	.490	2.041

a. Variabile dipendente: BL

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