

The Future of Digital Retail: How do avatar-led branded experiences relate to users' decisions to purchase virtual goods on Roblox?

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ABSTRACT

This thesis explores how avatar-led branded experiences on Roblox influence users' purchasing behaviors. With increasing immersion and sociability within virtual worlds, brands are making significant investments to create gamified, avatar-led worlds. However, currently, little is known about what features of such branded experiences affect users' purchasing decisions. To contribute to this knowledge gap, this research employs a qualitative research method that combines non-participant observations of three branded worlds, H&M Lootopia, Vans World, and ALO Sanctuary, with two semi-structured interview sessions with two adult Roblox players.

The research determined four emerging themes that motivate consumer engagement with branded virtual clothing and accessories: avatar customization as identity expression, psychological ownership and perceived value, social influence and peer validation, and branded world engagement and experience quality. They were determined through systematic thematic analysis and indicate that consumers are more likely to interact and buy digital goods when these behaviors enable personal expression, emotional connection, and social alignment.

The results add to academic discussions on virtual consumer behavior and brand co-creation in metaverse environments. Strategically, the research offers recommendations to marketers designing branded space in immersive digital environments. The research suggests facilitating identity expression and symbolic value creation through customization and establishing a sense of community and recognition. Finally, this study demonstrates that branded metaverse spaces are not only promotional spaces, but also social ecosystems that foster more engagement and influence purchasing intentions.

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Keywords

Virtual consumption, branded experiences, metaverse marketing, avatar customization, Roblox, psychological ownership.

1. INTRODUCTION

1.1 Background and Context

The metaverse is built on advanced technologies such as blockchain, virtual reality (VR), and augmented reality (AR). This three-dimensional environment has been going through a period of fast development over the past several years. According to Effing (2024), the metaverse refers to an emerging, three-dimensional, interconnected environment that combines VR and AR. This technology has changed human interactions, socialization, and consumption within digital environments. Its most defining feature is that it allows virtual ownership, redefines digital identity, and presents new opportunities for economic growth (Mystakidis, 2022).

One example of a metaverse platform is Roblox, which has grown into a large social gaming environment with over 380 million users worldwide (Backlinko Team, 2025). Due to its large user base, Roblox has turned from a gaming platform to a whole digital society. The platform provides games, socialization, brand experience engagements, and the ability to purchase virtual goods, non-physical, digitally owned items. These interactions happen between avatars, virtual characters that can be customized to embody the user within the virtual world. Belk (2013) explored the extended self within online environments, while Kaur et al. (2023) looked at how Gen Z expresses their identity within the metaverse. According to these authors, now that users see their avatars and the virtual goods they acquire as extensions of their identity or a way to express themselves, the line between self-expression and consumption is becoming increasingly blurred.

Well-known brands such as Gucci, Barbie, and the NFL have acknowledged the strategic value of developing avatar-led, immersive brand experiences—branded digital environments designed for user interaction in Roblox (Roblox, 2025; Peng et al., 2017). These experiences enable players to explore the environments, interact with other players, and purchase branded virtual goods. Digital goods can be purchased within the branded world or from the Roblox marketplace using platform currency (Mystakidis, 2022). The metaverse enhanced marketing and took it to a whole new level, allowing businesses to create dynamic and visually appealing spaces for customers to engage through gamified and personalized interactions (Mystakidis, 2022; Tuah et al., 2017).

1.2 Research Question

Major brands invest heavily in creating virtual experiences on Roblox. Despite that, there is a limited amount of evidence available that explains what aspects of avatar-led branded experiences relate to users' purchasing intentions for virtual fashion goods. The research on the relationship between external design, mini-games, skins, avatar clothing, or limited-edition goods and consumers' purchasing intentions is limited. Therefore, this research examines the following:

“How do avatar-led branded experiences relate to users' decisions to purchase virtual goods on Roblox?”

To answer this question, this study combines non-participant observation across various branded Roblox experiences with semi-structured interviews to explore the topic. The research investigates user engagement with avatar-based branding techniques, the interpretation of virtual products, and how these factors affect purchase intentions.

1.3 Academic and Practical Relevance

As mentioned in the *Research Question*, there is limited availability of studies that look at how the experience of branded spaces and the fashion goods they create encourages players to buy digital goods such as clothing items, accessories, limited edition collectables, and branded digital merchandise. This study adds to the knowledge gap of this topic by connecting specific aspects such as customization, interactions, and exclusivity to users' perception and purchasing decisions. To accomplish this, three theories are used: self-extension, psychological ownership, and consumer engagement. The theories are used to see how they relate within a branded metaverse context. Additionally, this research provides insight into the interactive features of avatar-led experiences that align with users' interests in virtual fashion. Brands need this insight to better allocate their budget better and create more engaging and commercially effective brand experiences.

2. LITERATURE REVIEW

2.1 Avatar-Led Branding and Identity Expression

In the immersive digital environment, avatars became self-representations and a digital extension of the users. Belk's (2013) theory of self-extension theory is foundational for understanding how digital possessions, such as virtual clothing and avatars, are viewed by users as an extension of themselves. Kaur et al. (2023) apply self-extension theory in a metaverse environment to explain how Gen Z and Gen Alpha consumers adopt avatars as a tool of identity signaling, the way people express who they are and who they wish to be via apparel and accessories. Similarly, Ducheneut et al. (2009) and Chung et al. (2024) examine how enabling users to customize avatars opens them up to a chance to express their social status, values, and creativity. These observations lay the groundwork for understanding the self-extension theory in digital spaces. Users project their identities and values through avatars, and this behavior is closely connected to the idea of digital self-extension.

Branded experiences within Roblox build on this pattern of behavior. In immersive worlds like H&M Lootopia and Vans Worlds, shoppers customize their characters not only to look good but also to express themselves. These branded personalization aspects allow users to show off their personal styles while also fitting in with the social norms of the platforms. As a result, virtual goods users' wear started to become more meaningful. This reflects the concept found in self-extension theory, which states that people use possessions, including digital goods, as a means to express their identity and show their social status.

This aligns with the concept found in the self-extension theory that people use their belongings, especially digital ones, to show their social standing and identity.

2.2 Immersive Brand Experience and Purchase Intention

Immersive brand experience has been described as a combination of multisensory interaction, gamification, and personalization. These immersive experiences can be categorized into three main types: interactive, aesthetic, and social (Tuah et al., 2017). On Roblox, they are created using interactive features like mini-games, avatar customization, and real-time social interactions, transforming the user's position from a viewer to a player.

Brodie et al. (2011) suggest that consumer engagement is a process beyond simply commercial exposure. The process is complicated and involves our thoughts, feelings, and actions. Evidence for this can be seen within research conducted by Peng et al. (2017) and Mystakidis (2022). The authors show that

virtual brand environments that are rich in interactive and social features have a strong impact on users' perception of the brand. Nevertheless, most of the research that is out there only studies engagement as a general concept. Nevertheless, most of the research that is out there only studies engagement as a general concept. The researchers do not look deeper into specifics on what aspects of the experiences shape the way individuals form their purchasing decisions. For instance, avatar customization, access to exclusive branded items, and participation in gamified tasks all have numerous impacts on users' desire to buy. This research details into it in more detail aims to identify key factors and how such factors affect user behavior within a virtual environment.

The greater the interactivity, personalization, and social interaction levels in branded spaces, the more positive the users' attitude towards the brand is, as the experience itself can be enjoyable, emotionally rewarding, or even inspiring (Merrilees, 2016). Thus, users have positive attitudes toward the brand. This can further induce users to become more interested in virtual branded goods, such as clothing and accessories, displayed in such settings.

2.3 Psychological Ownership and Perceived Value

There is a correlation between the amount of time consumers spend within a branded virtual experience and the amount of time they spend engaging in activities such as earning, collecting, or modifying digital fashion apparel. The more time, effort, and participation a user invests in these activities, the stronger the emotional bond between users and the digital fashion goods is created. Even if they do not physically own the digital clothes, users build a sense of connection to them as they continue to interact with them. This form of attachment can be explained as psychological ownership and can make digital clothing more valuable and meaningful (Pierce et al., 2001). A user is often more likely to pay for a digital fashion item if they have a strong emotional connection to it, especially if it is a branded item. Thus, the concept of psychological ownership could be used to explain why users desire to purchase virtual fashion products if they have somehow engaged with the brand.

Chuang et al. (2024) examined the factors that influence psychological ownership in the context of avatar creation. The authors discovered that when users are given the ability to personalize their avatars with virtual clothing to their liking, these virtual clothes become an extension of themselves. This affects the degree of emotional investment the user gives to the virtual clothing, therefore increasing their sense of ownership.

Perceived value is a strong driver for users' purchasing intentions of virtual fashion products. Users see value in digital products based on their uniqueness, exclusivity, and perceived social status. Some users see their virtual clothes as something that lets them stand out or enhance their virtual identity, thereby increasing the items' attractiveness and perceived value. This heightened feeling enhances psychological ownership, which affects users' purchasing behavior and makes them more likely to pay for branded virtual clothing.

Moreover, the connection between self-extension, psychological ownership, and consumer engagement must not be considered separate or linear. In virtual branded worlds, the process will be connected. Customization options not only lead to emotional investments of users in virtual branded clothing and accessories but also enable players to extend and experiment with different aspects of their identity (Belk, 2013). The control, investment, and identity expression dynamic aligns with Pierce et al.'s (2001) conceptualization of psychological ownership. Chung et al. (2024) further argue that this type of customization enables

avatars to serve as digital representations, promoting identity signaling and user-brand interaction at a deeper level, and thereby enhancing purchasing decisions. This shows that the concepts of psychological ownership and perceived value work together in the virtual setting.

However, these theories have been accused of making assumptions. For instance, self-extension theory has been criticized for not being entirely applicable to modern virtual space, where players tend to prefer changing identities based on context, as opposed to attempting to present coherence. (Park & Ko, 2020). Similarly, gamification and immersive branding are widely recognized as effective in enhancing engagement. Scholars warn against the excessive use of gamified features (quests, rewards, etc.), as they can result in desensitization or superficial engagement (Wanick et al., 2017). This brings up concerns with sustaining long-term consumer-brand relationships in avatar-led metaverses and calls for greater empirical insight.

2.4 Knowledge Gap

Despite prior research acknowledging the relevance of self-extension, psychological ownership, and engagement in virtual worlds, there is a limited number of studies on how these psychological constructs are connected to branded features on Roblox. The uniqueness of this research is that it will add to this knowledge gap by examining user behavior and perceptions through observations, while interviews will complement the findings.

Combining self-extension theory (Belk, 2013), concept of immersive brand experience (Tuah et al., 2017), and psychological ownership theory (Pierce et al., 2001) provides a balanced understanding of how users act in avatar-led branded experiences on Roblox. Together, these theories show the main drivers that affect users' purchase intentions of virtual fashion goods.

3. METHODOLOGY

3.1 Research Design

This research employs a qualitative, exploratory approach, combining non-participant observations as the primary data collection method and semi-structured interviews as a secondary method to confirm the results. Thematic analysis follows Braun and Clarke's (2006) six-phase framework, which allows for the identification of hidden themes of identity expression, psychological ownership, and social validation. The qualitative approach is well-suited for identifying the symbolic and emotional aspects of avatar-led branding experiences, which can be challenging to measure quantitatively in a meaningful way. Considering this topic a relatively new concept and the limited availability of data, a qualitative method was chosen.

Non-participant observation provides insights into natural consumer engagement. This allows for the capture of users' behavior and interactions with branded content. While semi-structured interviews allow a deeper understanding of participants' motivations and purchase intentions. The combined approach allows a better understanding of consumer behavior with the virtual branded content.

3.2 Sampling

For the observations, ALO Sanctuary, H&M Lootopia, and Vans World servers were intentionally selected for this research. These branded experiences were selected for their high user activity levels, fashion-oriented environment, and immersive brand

experiences that are relevant to this research's focus on digital self-expression and branded engagement. H&M Lootopia, for instance, paired avatar customization with item creation, making it perfect for observing identity expression. Vans World is based on skate culture, mixes branded equipment and social play, while ALO Sanctuary focuses on communal well-being through aesthetic similarity and its activities. This diversity in branding strategies allowed for comparative observation of users' interactions with and customization of branded content across a range of digital spaces.

For the interviewees, two Adult Roblox users were recruited through Roblox-related Discord servers. Individuals were messaged with an invitation to take part in a survey about branded experiences and digital fashion. Interested users were contacted regarding their familiarity with branded experiences and their willingness to participate in the interview, and later interviews were scheduled and conducted via Microsoft Teams. Their answers were used to validate and contextualize findings from the observational data.

3.3 Data Collection

Non-participant observations were conducted in three previously mentioned fashion-branded Roblox experiences. The observations were divided into six sessions, with three sessions per week, each lasting 30 minutes, from May 18th to June 11th. In each session, 2 users were observed, and the focus of the observations was on users' interactions with branded games, the environment, and virtual apparel. The users observed in the sessions were selected randomly.

The 30-minute sessions provided enough time for users to explore the branded engagement elements, interact with customization tools, and participate in various activities without experiencing environmental repetition. During each session, notes were taken, covering server type, visual and branded elements, social behavior, and purchase engagement.

The 11 semi-structured interview questions were created to explore participants' motivations, attitudes, and behaviors related to avatar customization and branded virtual experiences. The questions were thematically grouped into four themes that were introduced in literature review. Questions 1, 2, and 6 focused on avatar customization and identity expression. These questions were meant to ask how respondents style their avatars and whether or not the choices mean anything about their personality or identity. Questions 7, 8, and 11 focused on psychological ownership and perceived value, asking interviewees about the emotional engagement with virtual goods and what virtual clothing and accessories are "worth spending" on. Question 9 looked at social influence and peer validation by asking if respondents had been influenced by the look or behavior of other players or not. Questions 3, 4, 5, and 10 were focused on branded world engagement and experience quality. These questions are meant to find out about users' experiences and interactions with branded Roblox worlds and what they found engaging and attractive about these worlds. These interviews provide rich, reflective data that was used to confirm the behavioral patterns found in the non-participant observations.

The interviews were conducted online through Microsoft Teams. The first interview was conducted on June 3rd, the second one on June 6th. Questions were related to participants' customization motivation, experience within branded environments, and attitude toward virtual fashion goods. Data gathered from the interviews was used as a secondary source to validate themes identified from observations.

3.4 Data analysis

The data will be analyzed using thematic analysis, which is a six-phase framework: familiarization with data through reading and re-reading transcripts and observation notes, open coding to label relevant features of the data, categorization of codes into broader themes, and interpretation of themes in relation to the theoretical frameworks (Braun et. al., 2006). Codes were grouped into broader themes, which were then interpreted within the theoretical framework.

Both observation and interview data were coded with the same codebook to enable thematic consistency across both sources. The unit of analysis was user behavior, interactions, and direct quotes signaling interaction with branded content.

During coding, a codebook was developed to ensure consistency, and the codes were redefined throughout the process. A frequency matrix will be used to compare the frequency of themes across the data (Nowell et al., 2017).

3.5 Ethical Considerations

The research followed the University of Twente's ethical guidelines. Interview participants were informed about the purpose of the interviews before the interview and gave their consent to participate. The participants were assured of anonymity and the safe handling of their data. Observations were non-participatory, so no user-identifiable data has been gathered.

4. RESULTS

4.1 Overview of the data

The data from the observations and the interviews were categorized into four main themes: Avatar customization and identity expression, psychological ownership and perceived value, Social influence and peer validation, and branded world engagement and experience quality.

4.2 Avatar Customization as Identity Expression

The research revealed that avatar customization plays a significant part in how users express their identity, as was supported by both the observations and the interviews. Users frequently experimented with their clothes and styles, mixed and matched them, and used different in-game tools to personalize their avatars. Some users commented things like "Love this set," referring to the outfits they chose.

For instance, many users in H&M Lootopia actively collect mystery boxes to collect clothing items, prints, and colors, then build a unique item piece in the creation station. H&M has a store where users can buy accessories and dance moves. Vans World offers users access to various stores, each specializing in things like accessories, shoes, clothing, and skateboards.

When entering Vans World, each user automatically receives a default skateboard, which they can later customize in the skate shop. Users also frequently changed outfits or a few items on the avatar after visiting a store or seeing other players. One observer wore a limited-edition backpack while skating. Another user customized a full skateboard and shoes to match each other, aligning their look with the space's aesthetic. Like in Vans World, when entering

At ALO Sanctuary, users can receive a free yoga mat, and they can choose from three colors: black, blue, or pink. Some observers were dressed in branded items, stuck with a particular yoga outfit, wrote "love this set", and went to participate in a yoga class.

From the interview data, one respondent described the avatar creation process as “a way to stand out from others, show your individuality, and to be considered cool.” Another explained that Roblox gave them the chance to “experiment with something new without judgment.”

Within Roblox worlds, avatar personalization is central to user engagement and self-expression, as evidenced by these repeated behaviors and reflections across all data sources.

These repeated behaviors throughout servers illustrate that avatar customization serves more than just for aesthetics. It serves as an unconscious act of self-expression. This makes it relevant for exploring how individuals shape and express their identity within branded virtual worlds.

4.3 Psychological Ownership and Perceived Value

The data collected revealed that emotional connection is often deeper when users invest time, effort, customization, or find personal significance in digital items. Taking H&M Lootopia for instance, users were enthusiastic about finding and unlocking mystery boxes and then mixing colors, prints, and items to create a unique fashion item. One observer has been gathering collectible elements and then creating new fashion items multiple times.

In Vans World, users frequently customize their skateboards and shoes, as they were the only items that were customizable. One of the observers matched their shoes to the board, which they had worn while skating. Another person wore a limited-edition backpack while skating and participating in a tournament.

One interviewee stated that if they use a virtual item a lot and it matches their style, they will more likely feel that the item is worth buying or keeping. Another one shared:

“I once bought a Messi t-shirt. I like him as a football player, and before this purchase, he won the World Cup.”

4.4 Social Influence and Peer Validation

The observations showed that user activity in branded Roblox worlds is often influenced by what other users are doing or wearing. In H&M Lootopia, a user was observed switching multiple times and interacting with another user to find out where one of his pieces of clothing was purchased. In Vans World, one user was wearing an exclusive limited edition backpack while skateboarding in the main fountain in one of the Vans mini worlds, another user customized shoes and a skateboard to match each other. These actions appeared in the center of the map. In Alo Sanctuary, a user wore a full branded yoga outfit and went to a yoga group class.

The same behavior is also seen in the interview data. In interview 1, the participant stated:

“It’s fun to match your avatar to a whole vibe. If others are wearing the same brand, it also feels like you’re part of something. I usually change outfits to fit where I am.”

This answer explains how outfit decisions are made in consideration of social context and surroundings.

In interview 2, comparison to other players is evident stronger, as the participant states:

“Everyone had cool-looking avatars, and I was like a newcomer, so I bought upgrades in the games and clothes to look cool.”

“Yes. If many people are wearing the item, I would also want one as it’s considered cool. These people are like a walking

marketing stand, it influences you to make the same purchase as they do.”

4.5 Branded World Engagement and Experience Quality

During the observations, in H&M Lootopia, users were actively participating in activities like scootering, collecting mystery boxes, earning currencies, and creating customized fashion products. These features provided users with a sense of purpose and direction, which kept them engaged in doing multiple activities at the same time. One of the observed users bought a dance movement in the shop and has been dancing, and another was seen leaving the main world to visit another world within the same server.

Vans World is centered around skateboarding and customization. Players skated around the map, collected in-game currency, participated in skating tournaments, and customized their shoes and skateboards. ALO Sanctuary, on the other hand, did not provide action-oriented activities. The server has more of an aesthetic and social atmosphere. Some observers walked around the map looking at the nature and features like waterfalls, while others participated in the yoga classes. This immersive engagement aligns with the brand, being more relaxed and less active than the other branded experiences.

5. ANALYSIS

Table 1: Frequency of each thematic code identified during observations across the three branded Roblox environments.

Theme	H&M	Vans	ALO	Total Mentions
Avatar Customization and Identity Expression	3	3	2	8
Psychological Ownership and Perceived Value	1	2	1	4
Social Influence and Peer Validation	1	2	1	5
Branded World Engagement and Experience Quality	3	3	1	7

Table 2: Frequency of thematic codes identified in interviews.

Theme	Interview 1	Interview 2	Total Mentions
Avatar Customization and Identity Expression	4	3	7
Psychological Ownership and Perceived Value	3	3	6
Social Influence and Peer Validation	2	3	5
Branded World Engagement and Experience Quality	2	2	4

Tables 1 and 2 are the outcomes of a systematic frequency-based analysis of the data. Table 1 shows the frequency with which each of the thematic codes appeared within the 12 observation sessions carried out in three Roblox worlds (H&M Lootopia, Vans World, and ALO Sanctuary). Table 2 shows the frequency

of the same themes in the two interview transcripts. These tables provide a solid understanding of the most common user behaviors and patterns of engagement. ‘Avatar Customization and Identity Expression’ was the most seen theme in both data sources. The second most seen theme was ‘Branded World Engagement and Experience Quality’, followed by ‘Social Influence and Peer Validation’.

5.1 Avatar Customization as Identity Expression

The ‘Avatar Customization and Identity Expression’ theme was the most frequently coded within the collected data. According to the systematic analysis, this theme has appeared in 8 of 12 observation sessions and 7 times across interview answers. This frequency shows that customization is a common feature and an important part of how users engage with branded environments on Roblox.

The users were able to apply features that allowed them to customize their avatars in each of the three branded worlds and used these to make customization choices based on their unique style and taste. In H&M, users created outfits by combining and collecting fashion elements. In Vans, they matched shoes to their skateboards. While at ALO, they selected yoga mats and clothing that complemented the brand’s serene aesthetic. Avatar customization serves as a significant way for self-expression, represented in these patterns.

This concept of possessions aligns with Belk’s (2013) extended self theory, which supports the idea that both virtual and physical goods serve as a way of self-expression. Since users have limited options to express themselves verbally or physically in the virtual Roblox servers, avatar customization becomes the primary way to express their identity. Identity alignment and intentions can be observed in the smallest choices, such as color coordination or wearing the same clothing. This goes beyond aesthetics; these customization choices reflect symbolic consumption. In choosing a brand product that signifies a lifestyle e.g. skate culture at Vans or wellness at ALO, users are showing identity through symbolic behavior. Merrilees (2016) refers to this as the symbolic value of the co-created brand, where meaning emerges from how users express identity through branded clothing in shared digital practices and cultures.

Interview responses confirm the connection between avatar customization and identity expression. According to a respondent, personalization allows them to “stand out from others”, “show individuality”, and experiment with styles. This shows the performative aspects of customization in online social worlds, rather than necessarily personal or symbolic. Avatars on Roblox are not only an expression of self but also of public display as players craft their appearances with the understanding that others will see and interpret them. Therefore, avatar customization is an act of social signaling and impression management. Kaur et al. (2023) argue that younger players often use avatars to test style boundaries and different versions of themselves in ways that are not possible offline.

In the article, Brodie et al. (2011) explain that meaningful engagement requires investment of attention, emotion, and effort, which is indicated by the high frequency of this theme in both interviews and observations, indicating a deeper level of cognitive and emotional engagement. Users become active engagers when they invest time and emotions into avatar personalization. The best part of this is that brands benefit from this process. As users create outfits using branded virtual products, such as Vans sneakers or ALO mats, they don’t just personalize their avatar. They embrace the brand into themselves. This transforms the customization process into

adapting a brand as part of a user’s identity, thereby increasing user satisfaction and long-term brand loyalty.

This identity-based engagement has long-term consequences for brand loyalty. When consumers associate personal meaning with a branded product, the brand becomes a part of their ongoing digital identity. Brodie et al. (2011) point out that sustained cognitive and emotional engagement can result in increased loyalty.

5.2 Psychological Ownership and Perceived Value

The interviews and observational data suggest that digital clothing holds emotional and personal meaning for users who invest time and effort in getting or personalizing it. This idea aligns with psychological ownership theory, described by Pierce et al. (2001), as a feeling individuals have of owning something when they have put in effort to obtain or create it. According to the systematic analysis, the theme was coded 4 out of 12 times in observations and 6 times in interviews.

In H&M Lootopia, for instance, one participant repeatedly opened mystery boxes and created new outfits a few times within a session. While the feeling itself cannot be observed, this repetitive behavior of the user suggests that the process held personal significance. Players from Vans World were observed matching shoes to a skateboard and wearing a limited-edition backpack while skateboarding. These activities suggest brand engagement as well as customization-related engagement, showing personal investment and control over the creation process, which, according to Pierce et al. (2003), can foster psychological ownership.

An interview respondent explained that the more they use a virtual product and it fits their style, the more they feel like it is “worth buying”. Another respondent said that they don’t buy exclusive, branded clothing, but it would be “cool” to own them if they could. These answers show that the value of virtual accessories and clothing is not just determined by whether or not they are limited or rare, but by how well they reflect the user’s personal style and identity. Players are more likely to find a virtual product appealing if the product “fits” their style. This reflects Chaung et al.’s (2024) statement that digital products are meaningful when users invest their identity into them. In this case, perceived value is a function of a combination of fit, frequency of use, and psychological ownership, with limited-edition products being desirable for the coolness and social esteem they represent.

The example with Messi’s t-shirt represents an important aspect of perceived value within digital fashion, which is symbolic association. Unlike value through customization or rarity of the product, this form of value is taken from the cultural or emotional significance attached to a branded item. The decision wasn’t motivated by utility or in-game performance but rather admiration for a real-life celebrity and his success in a big real-world event.

This means that consumers can find digital clothing and accessories valuable when these goods reflect personal interests, social identity, or hero narrative. This allows virtual clothing and accessories to have personal relevance and alignment with real-world interests and values. It aligns with the general concept of perceived value in virtual economies, where symbolic meaning and emotion can underpin the appeal of an item and legitimize digital consumption (Chaung et al., 2024). In branded metaverse environments, this creates a marketing potential of calling on users’ cultural icons or emotionally relevant references, which will enhance the attractiveness and purchase intentions of virtual products. In this case, the virtual goods carry emotional value,

reflecting personal admiration, and symbolic meaning, which refers to the cultural significance of Messi, such as success, sportsmanship, and fame. By wearing this shirt, the user signals alignment with these meanings, and the object serves as a means of expressing identity within a socially recognized system.

This can also be linked to Brodie et al.'s (2011) customer engagement framework based on emotional and cognitive investment in fostering brand relationships. Customers who are repeatedly switching, wearing, and using branded virtual clothing are engaging in brand-related identity creation.

Together, these findings suggest that perceived value is enhanced when virtual clothing is not only used but also co-created or earned through effort. Customization adds symbolic and emotional value to the digital fashion item, enabling users to see branded items as an extension of their digital persona. Allowing this level of customization and effort, brands create opportunities for a deeper user-brand connection and a higher willingness to spend money on digital clothing and accessories.

5.3 Social Influence and Peer Validation

This behavior was observed among branded Roblox worlds, indicating that avatar fashion and branded item choices among users are frequently shaped by social context. The theme appeared 5 out of 12 times in observation data and 5 times in interview data in the systematic analysis, demonstrating a pattern of peer influence and validation in user engagement.

This pattern suggests that such customization is not only self-driven but is often encouraged through peer observation. Users customized their avatars after observing peers' branded clothing and accessories, attending yoga classes, skateboarding, or standing in high-visibility areas to showcase their styles and accessories. This supports the idea that branded virtual goods have symbolic value. Such behavior shows that users look at the styles of other players and change theirs to fit in, stand out, or to be "cool."

As many players select the same branded clothing items, it creates a visual norm within the environment, creating a sense of belonging. These fashion pieces serve as more than just an aesthetic but as a cultural narrative (Merrilees, 2016).

Data from the interviews confirms this perspective, as one participant said, "If others are wearing the same brand, it feels like you're part of something," while others described other players' avatars as "a walking marketing stand." This shows a powerful marketing tool that visually promotes branded clothing and accessories in a social digital environment through peer appearance. This shows that customers don't choose branded clothing just because of their personal preferences, but also due to social pressure, judgment, or what is considered to be stylish.

This also aligns with the extended self-theory (Belk, 2013). In this context, branded virtual clothes and accessories serve as both personal and social purposes. Ultimately, such behavior contributes to co-creation or symbolic value. By copying, imitating, and reacting to each other's styles, users give these virtual clothing more meaning. This clothing becomes part of how accepted players feel. Merrilees (2016) explains that shared engagement builds brand value. Therefore, peer influence not only guides behavior but also increases the extent to which branded clothing feels valuable in an environment where identity, popularity, and visibility are closely linked.

The frequency of peer-driven outfit changes and mirroring behavior raises questions of how social dynamics shape consumer behavior. To understand the symbolic and social value

of branded fashion items in group settings, further analysis is needed.

5.4 Branded World Engagement and Experience Quality

The branded immersive worlds chosen for observation had varying levels of interactivity, thematic coherence, and user autonomy. These differences significantly affected the level to which users participate in the activities in the branded worlds. According to the systematic analysis of the observations, the theme 'Branded World Engagement and Experience Quality' was the most frequently coded in the H&M Lootopia and the Vans World. In these two servers, it appeared 3 times, and in the ALO Sanctuary only once, which totals to 7 out of 12 observation sessions. This frequency level shows that H&M and Vans had more clearly designed and interactive activities like collecting items, customizing avatars, etc., which helped users to connect with the brand in a memorable and fun way.

H&M Lootopia initiated engagement through the discovery and collection of mystery boxes. Players opened the boxes and collected different elements that were needed to create a clothing piece at the creation station. This cycle of collecting and creating was witnessed many times. This activity supports Merrilees' (2016) value co-creation concept, where users become co-creators of the brand. This pattern was seen multiple times in the H&M observation data.

While Vans World had the same number of frequencies (3) as H&M Lootopia, they offered a more focused yet thematically aligned experience, which is based on the skater culture. Members were mainly engaged with skateboarding and collecting in-game currencies, and as has been mentioned, customizing skateboards and shoes. One user matched their shoes with a skateboard and entered a mini-skating competition. Which is again a pattern, but a thematically aligned one. While there is less to explore than in H&M Lootopia, the thematic alignment of the world with Vans' skating identity helps users feel more connected to the brand. This aligns with Tuah et al.'s (2017) concept of narrative integration, where branded items and design within the virtual world share a story or a theme.

ALO Sanctuary scored the lowest in this theme, but they had another form of engagement. The brand offered users yoga mats, synchronized yoga classes, a running track, and a lounge room. The interactivity level was low, however, users showed an emotional connection to the brand's mindful and holistic character. A user from the observations commented, "love this set" as she walked into a yoga class. This shows a significant personal engagement even in a low-action setting, and that the engagements don't have to be complex to be meaningful.

Upon examining the data, a pattern emerges: worlds that foster user autonomy, creativity, and immersion tend to have higher engagement scores. This observation aligns with Brodie et al.'s (2011) multidimensional engagement theory, which posits that for a meaningful brand-user relationship, depth in cognitive, emotional, and behavioral aspects is essential. These findings confirm that branded worlds are co-constructed experiences and not a marketing strategy. When consumers can participate, customize, and express themselves within a branded world, the engagement becomes more meaningful. Brands that allow this kind of immersive identity performance create a stronger emotional bond and capture users' interest.

Different levels and patterns of user engagement across branded worlds signify varying degrees of engagement. They are important for analysis to understand the effect of design on brand-user relationships.

6. CONCLUSION

6.1 Answering the research question

The research was carried out to investigate the following research question: “How do interactive, avatar-led branded experiences on Roblox influence consumers’ purchase intention for retail digital goods?”. Based on non-participant observations that were supported by interview responses, the results show that a combination of identity expression, emotional investment, and social influence influences consumers’ purchasing intentions for retail digital goods. Avatar customization is a form of self-expression, and virtual fashion is thereby a symbolic extension of the user’s identity. As players repeatedly engage with branded content, they develop a sense of personal value for the items, despite not owning them. Moreover, peer behavior and visual norms within branded worlds have a significant influence on what is seen as desirable or “cool” by consumers, further influencing purchase intention. Together, these patterns suggest that avatar-led branded experiences work as immersive and socially dense environments where direct persuasion, emotional, symbolic, and social processes shape purchase intentions.

6.2 Recommendations for Practices

For brands that operate in Roblox and other metaverse platforms, there are some practical implications from these findings. Enabling a high degree of user autonomy and customization is very important. Tools that allow users to co-create and customize digital branded retail goods increase emotional investment and strengthen users’ psychological ownership of these goods. Another finding is that brands need to consider how social presence through visual signaling, exclusivity, or peer interaction adds symbolic value to their virtual goods. Placing branded retail digital goods in interactive, high-traffic areas and embedding them into branded experiences like mini-games or fashion contests can improve visibility and enhance desirability through social validation. Finally, immersive brand experiences must be built not simply as online retail stores but as thematic and expressive worlds where users would want to inhabit, explore, and revisit. There has to be a shift from transactional marketing to participatory brand ecosystems.

6.3 Suggestion for Future Research

Future studies should expand the sampling scope and increase participant diversity. This research is dependent primarily on data gathered through observations and interviews. However, including quantitative measures, such as time spent within branded spaces or purchase history, can be used to support and

measure key behavioral insights. In addition, younger Roblox players can be included in future research since they are the ones who mostly play the game. Beyond ethical considerations, the inclusion of young players may provide more insight into what drives players to purchase clothing and accessories in the game and how these young players use games in forming their identities. This future work can also be complemented by involving stakeholders like brand partners or Roblox developers. These stakeholders can offer a behind-the-scenes view of how virtual brand experiences are designed and evaluated for engagement and monetization. Including categories beyond fashion and lifestyle might raise questions about whether similar principles would apply across different brand categories.

6.4 Limitations

This research has several limitations, including a lack of data. The interview sample consisted of only two participants who were adult players, meaning their experiences may not be representative of the platform’s dominant younger user base. While these interviews provided depth and insight, they cannot be generalized across age groups and demographics. Additionally, there was no access to brand representatives or Roblox staff. Interviews with these stakeholders could have revealed strategic and design intentions behind the branded environments.

Another limitation arises from the focus on a small selection of branded worlds. While these worlds represent diverse fashion and lifestyle themes, findings may not be extended to other product categories or to less interactive or lower-engagement branded servers. At last, the use of observation data limits the insights into users’ internal motivation, which was only partially addressed in the interviews.

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8. APPENDIX

Appendix A: Observation Coding Table

Session	User behavior	code	Theme
Alo 1 User 1	Stayed in the shop the whole time, looking at the pieces the brand is offering. Found the pieces wanted and bought it.	Avatar customization.	Avatar customization and identity expression.
Alo 1 User 2	Synchronized yoga with a group, stayed in lounge area, wearing full branded gear.	Use of branded clothes to fit within the group.	Social influence and peer validation.

Alo 2 User 1	Walked through nature trail, paused at waterfalls, consistent outfit aesthetic.	Scenic exploration and visual self-curation.	Avatar customization and identity expression.
Alo 2 User 2	Tried branded items, stuck with one, wrote 'love this set', then went around the world to learn yoga poses.	Emotional attachment to brand item.	Psychological ownership and perceived value.
H&M 1 User 1	Rode a scooter around the map opening mystery boxes to unlock prints, item types and colors. After collecting the requirement when to creation station to design a new outfit. Then did the same thing all over again.	Gamified collection and fashion asset creation.	Branded World Engagement and Experience Quality.
H&M 1 User 2	Walked around looking for mystery boxes, went on the catwalk, looked for someone to trade clothing with.	Social interaction through trade and performance. Explored the world.	Social influence and peer validation.
H&M 2 User 1	Scooter around opening mystery boxes and collecting world currency, then when to the store to buy an upgrade for avatar, bought a dance move and have been dancing.	In game economic activity and avatar enhancement through performance features.	Branded World Engagement and Experience Quality.
H&M 2 User 2	Have been trying on different outfits that were collected within the game, when chose outfit, rode on scooter to another mini world.	Outfits trying and traveling across mini worlds.	Avatar customization and identity expression.
Vans 1 User 1	Skateboarded, customized skateboard deck, wore full Vans outfit.	Branded product interaction and identity alignment.	Avatar customization and identity expression.
Vans 1 User 2	Focused on the stores, changed outfit 3 times, asked others where items came from.	Repeated change of outfits, and peer interaction.	Social influence and peer validation.
Vans 2 User 1	Customized board and shoes, moved near others at ramps, joined the mini skateboard race.	Customization and wanting to be part of the group.	Social influence peer validation.
Vans 2 User 2	Skated and wore limited-edition backpack.	Use of exclusive branded items. Actively playing mini games.	Psychological Ownership and symbolic affiliation.

Appendix B: Interview Questions

<ol style="list-style-type: none"> 1. How important is it for you to personalize your avatar on Roblox? 2. What kind of clothing or accessories do you usually choose? Why? 3. Have you ever used branded digital retail goods (like Vans shoes) in your avatar look? What made you choose them? 4. Do you spend time in branded worlds? 5. What features or experiences keep you interested in those branded spaces? 6. Have you ever felt like your avatar represents your personal style or identity? 7. Have you ever spent Roblox (or real money) on avatar clothes? What motivated that decision? 8. What makes a virtual item feel “valuable” or “worth buying” to you? 9. Do you think seeing others wear branded digital retail goods affect your decisions to buy or wear them yourself? 10. Do you think brands are doing good job at creating cool experiences on Roblox? 11. How do you feel when wearing a virtual item that’s also available in real life?
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Appendix C: Interview 1 – Roblox Player A: Coding Overview

	Response	Coding	Theme
1	For me, it is important as I really like to choose nice outfits and not default ones. Also, it is interesting to pick new features, makeup or clothes. For me it is more about the process and not about how others see it.	Avatar customization as personal creative process.	Avatar Customization and Identity Expression.
2	I think I stick to unusual outfits because there are a lot of options that I would never wear in real life. It's a chance to experiment with something new without judgment.	Experimentation with virtual identity different from real life.	Avatar Customization and Identity Expression
3	I think yes, but in Roblox. I think I chose them because I wear those brands in real life.	Use of branded items based on real-world brand familiarity.	Psychological Ownership and Perceived Value.
4	Yes, I've visited some of the branded places. I remember being in the Vans world where you could skate and earn game currency through skating. I liked that I could try on new things while doing challenges — it made it feel more rewarding.	Enjoyment of branded environments with interactive features.	Branded World Engagement and Experience Quality.
5	It's fun to match your avatar to a whole vibe. If others are wearing the same brand, it also feels like your part of something. I usually change outfits to fit where I am.	Avatar-brand alignment and social signaling.	Social Influence and Peer Validation.
6	Yes, I choose outfits that match my style and mood, sometimes to look cool, sometimes just to be funny. It really depends, but it's always very personal.	Avatar choices reflect personal mood and identity.	Avatar Customization and Identity Expression.
7	I haven't spent real money in Roblox yet, but I do spend Robux I earn or get as gifts. If I like an outfit a lot and see others wearing it too, I'm more likely to get it. It kind of feels like you're missing out	Purchase influenced by aesthetic appeal and peer visibility.	Psychological Ownership and Perceived Value.
8	It depends on how much I play. If I'm active in the game, I want items I'll use a lot. So I think about if it fits my vibe and if I'll keep coming back to it.	Long-term value linked to game engagement.	Psychological Ownership and Perceived Value.
-			
10	Yes. When they do something more than just give you clothes, something like games or rewards, it keeps you interested. I like when it feels like an event.	Positive perception of branded experiences.	Branded World Engagement and Experience Quality.
11	For sure, if I see a lot of people wearing something or if it looks really good on someone else, I'll want to try it too. It kind of helps you decide what looks cool.	Social validation influences perceived value.	Social Influence and Peer Validation.

Appendix D: Interview 2 – Roblox Player B: Coding Overview

	Response	Coding	Theme
1	It is kind of important. It's a way to stand out from others, show your individuality and to be considered cool. In addition, just like in real life when you choose your outfit you want it to look good, you want it to be unique to you, you want to express yourself through what you wear, and you want to look at yourself. It actually brings pleasure and piece to see yourself looking good. The same goes for the avatars.	Avatar customization as self-distinction and peer visibility.	Avatar Customization and Identity Expression.
2	-		

3	Yes, I did. I once bought a Messi t-shirt. I like him as a football player, and before this purchase, he won the World Cup.	Branded item purchase tied to real-world admiration.	Psychological Ownership and Perceived Value.
5	I've been in a few branded worlds, just to see what it is and what they have. I don't spend a lot of time there because there are servers and games more interesting than the ones in the branded worlds and its mostly about buying their clothes.	Branded world engagement low due to commercial framing.	Branded World Engagement and Experience Quality.
6	-		
7	Yes. It's your avatar, and you can customize it however you like, which gives you the freedom to experience and experiment with styles you might never wear in real life. The avatar does not necessarily represent the style, but it does represent identity and what a person might like, but cannot wear due to certain things like religion, social restrictions, feeling judged, etc.	Avatar as space for identity exploration and expression.	Avatar Customization and Identity Expression.
8	I did spend real money on Roblox and on some games, and on clothing. Everyone had cool-looking avatars, and I was like a newcomer, so I bought upgrades in the games and clothes to look cool. Also, I've been playing Roblox for years now, and it would have been very sad, and I would've felt like a loser, not to have a cool avatar.	Purchase driven by peer comparison and social self-presentation.	Social Influence and Peer Validation.
9	I buy items I like. If the item looks good and cool, I don't mind spending money on it. About the limited-edition clothing, I don't buy it, as it is too expensive, but it would've been cool.	Purchase based on aesthetic appeal and perceived personal value.	Psychological Ownership and Perceived Value.
10	Yes. If many people are wearing the item, I would also want one as it's considered cool. These people are like a walking marketing stand, it influences you do make the same purchase as they do.	Peer influence and popularity drive purchase decisions.	Social Influence and Peer Validation.
11	I honestly think that games in branded worlds are boring, they don't offer much to do. All the world is what is for users to buy their clothes, and it is logical, they are producing clothing, not games, but still. Their branded experiences need some work.	Branded experiences lack interactivity or gameplay appeal.	Branded World Engagement and Experience Quality.
12	I like it, I think it's good. These items make you look like yourself in virtual life, which makes the avatar a real digital version of me. It creates some sort of link between you and your avatar, something where both of you are slightly alike.	Emotional identification with avatar -> digital self-extension.	Avatar Customization and Identity Expression.

Appendix E: Thematic codebook

Figure 1.1: Thematic codebook for Observations

Theme	Code
Avatar Customization and Identity Expression	'Avatar customization', 'Trying on outfits', 'Interaction with branded products and identity alignment'
Social Influence and Peer Validation	'Use of branded clothes to fit in', 'clothing trade', 'repeated outfit change'

Psychological Ownership and Perceived Value	'Emotional attachment to branded items', 'use of exclusive branded items'
Branded World Engagement and Experience Quality	'Gamified collection and fashion asset creation', 'In game economic activity', 'avatar enhancement through performance features'

Figure 1.2: Thematic codebook for Interviews

Theme	Code
Avatar Customization and Identity Expression	'Avatar customization as personal creative process', 'Experimentation with virtual identity different from real life', 'Avatar choices reflect personal mood and identity', 'Avatar customization as self-distinction and peer visibility', 'Avatar as space for identity exploration and expression', 'Emotional identification with avatar -> digital self-extension'
Social Influence and Peer Validation	'Social validation influences perceived value', 'Avatar-brand alignment and social signaling', 'Purchase driven by peer comparisons and social self-presentation', 'Peer influence and popularity drive purchases'
Psychological Ownership and Perceived Value	'Use of branded items based on real-world brand familiarity', 'Purchases based on aesthetic appeal and perceived personal value', 'Long term value linked to game engagement', 'Branded item purchase tied to real-world admiration'
Branded World Engagement and Experience Quality	'Enjoyment of branded environments with interactive features', 'Positive perception of branded experiences', 'Branded world engagement low due to commercial framing', 'Branded experiences lack interactivity or gameplay appeal'