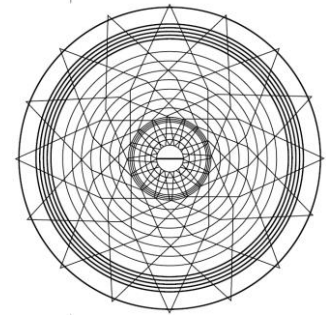


# [Scientific Articles]

Sizikova A.

*Tools of Brand Promotion Metaverse*



## TOOLS OF BRAND PROMOTION METAVERSE

### **Sizikova A.**

Project Manager at the Nomad Art Kazakhstan

(Almaty, Kazakhstan)

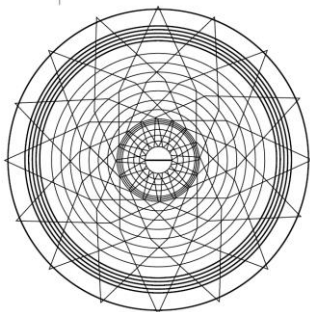
[anastasiaa.sizikova@gmail.com](mailto:anastasiaa.sizikova@gmail.com)

### **Abstract:**

Metaverse is a new immersive technology that is trending to become a new platform for branding, marketing and advertising campaigns. This study is aimed at studying the process of brand promotion in Metaverses, due to limited research on this topic. Majority of the current research is based on analogous virtual spaces, meaning that its data and conclusions may not be fully applicable to Metaverse. This study aims to identify brand promotion tools and study consumer behavioural responses to these tools. The study used a mixed methodology, exploratory design. Qualitative stage of the study involved interviewing experts from Russian marketing agencies that specialize in Metaverse brand integration. The interviews aimed to identify current promotion tools used in the Metaverse industry for brand integration in the Metaverse, as well as identify drivers and barriers encountered by the experts.

The quantitative part of the study was an online survey that was conducted among 122 active Russian-speaking Metaverse users. The survey results were used to gauge the behavioural and affective reactions of consumers to promotion tools, and to test the relationship of drivers and barriers of the Metaverse with promotion tools. Based on the results, six main promotion tools were identified, which were divided into two groups: interactive and native. The connections between promotion tools and drivers and barriers were also identified, and the behavioural and affective reactions of users to brand promotion tools in the Metaverse were studied. Two interactive tools (events, bonus system) had stronger correlations with drivers and barriers than two native tools (landscape advertising, product placement). However, one native tool (branded avatar accessories) demonstrated correlations comparable to the two interactive tools. There were no significant differences between interactive and native tools in influencing affective and behavioural responses. However, interactive tools such as bonuses and product testing, and native tools such as branded avatar accessories, were rated as most likely to generate positive consumer reactions.

**Keywords:** Metaverse, brand promotion, marketing communications, virtual reality



### **Introduction**

The Metaverse combines the physical and virtual worlds, creating an interactive and immersive virtual space using VR (virtual reality) and AR (augmented reality) technologies. This allows users to interact in real time with other users and brands. This new technology can transform business processes and give companies a competitive advantage in marketing and communications. Each year, Gartner Hype Cycle Rankings identify 25 most promising technological innovations for enterprise architecture and tech industry. By 2022, technology for enhancing immersive experiences, such as Metaverse, has become the number one topic. According to the rating, the Metaverse is under development and will peak in the next 10 years<sup>1</sup>. However, many companies and celebrities are already using the Metaverse to promote their products and services. Large multinational companies are also developing infrastructure for user interaction with virtual worlds, such as gaming platforms, online stores, and social networks. Several corporations, such as Roblox, Nvidia, and Unity, are working on creating realistic digital spaces. In 2020, the Metaverse market was worth almost five hundred billion dollars. Its growth is estimated to reach eight hundred billion dollars by 2024<sup>2</sup>. Many large Russian companies such as M.Video, cellular operators Megafon and Beeline, the clothing brand Befree and the Friday TV channel created their own worlds in Roblox. Tinkoff Bank has also created its own world in the Decentraland Metaverse, where the first concert of the Russian singer Mikhail Shufutinsky took place.

The Metaverse can become a new opportunity for business and marketing, however the technology is still in development. At this stage, there have been attempts to bring brands into Metaverse, but research on brand promotion in the Metaverse is limited. Large companies have the means to develop their own worlds on Metaverse platforms, while smaller brands would be able to use virtual marketing. However, research area lacks the publications that identify tools for promoting brands in Metaverses and describe the mechanisms of their work. Most studies theoretically describe the Metaverse and its possibilities in broad strokes. Thus, currently there is no clear understanding of the use of promotion tools for marketing and branding purposes in Metaverses. The purpose of this study is to fill the knowledge gap regarding brand promotion in Metaverses by identifying tools and identifying consumer behavioral responses to these tools.

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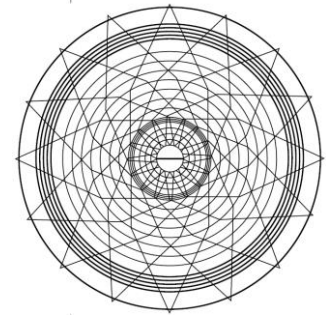
<sup>1</sup> Perri, L. (2022, August 10). What's New in the 2022 Gartner Hype Cycle for Emerging Technologies. gartner.com. <https://www.gartner.com/en/articles/what-s-new-in-the-2022-gartner-hype-cycle-for-emerging-technologies>

<sup>2</sup> bloomberg.com. (2021). Metaverse may be \$800 billion market, next tech platform. <https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/>

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## **Theoretical Framework**

### *Conceptualisation of Metaverse*

The metaverse is a digital multi-user reality that combines social, immersive virtual reality platforms and physical reality (Mystakidis, 2022). Multiplayer games and virtual environments such as Second Life (Gent, 2022), Roblox, Fortnite (Damar, 2021) were described in previous studies as predecessors of the Metaverse, but now some of them have already declared themselves as Metaverse sites.

Matthew Ball, author of the book 'The Metaverse: And How It Will Revolutionize Everything' defines the key characteristics of the Metaverse: persistence of connectivity (like the Internet), synchronous real-time existence for all users, a sense of individual "presence", unlimited number of users, economic interactions, platform compatibility, rich content and user experience (Ball, 2020). He also points out that games, virtual spaces and worlds, digital and virtual economies, virtual stores and user platforms are analogous but *not equivalent* to Metaverse.

Modern versions of the Metaverse combine several types of digital technologies: open game worlds and spaces, as well as immersive virtual reality platforms compatible with massively multiplayer online video games. Virtual reality creates a fully simulated environment for user interaction using VR devices (glasses, helmets, gloves, etc.). However, due to limited availability of VR technology, some Metaverses, such as Roblox, ZEPETO or Decentraland, are accessible on more wide-spread electronic devices.

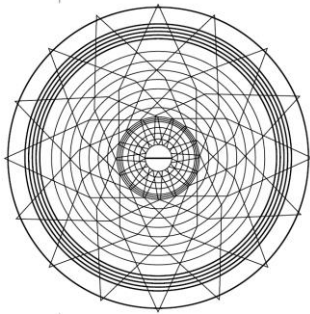
The Metaverse allows brands to create digital twins of their products and merchandise, providing users with the opportunity to try them in a virtual environment (Bushell, 2022). It also acts as a platform for hosting events, research, exhibitions, conferences and training (Bushell, 2022).

The Metaverse audience is mainly concentrated on Generation Z and Y, due to their active presence on social networks (Tayal et al., 2022), and video games are most in demand among these generations (Gridler et al., 2023). When developing promotion strategies in the Metaverse, it is necessary to take into account that generations Z and Y have different priorities and are different target audiences.

### *Features of virtual commerce in Metaverses*

Virtual commerce describes the process of consuming products and services in a virtual environment and is a type of commerce that is used in Metaverses, where brands can promote two types of products: physical and virtual (Denegri-Knott et al., 2010).

Retail researchers believe that virtual reality is one of the most promising innovations that will lead to significant changes in the consumer shopping experience (Roggeveen et al., 2020). VR devices, as well as the variety of virtual content, create a feeling of deep



immersion and presence, which significantly influences cognitive reactions and purchase intention. The advantages of this trading method include the ability to interact with the product in three dimensions in real time, which positively influences the purchasing decision; virtual platforms can offer products to customers by quickly adapting to the consumer's personalized request (Fang et al., 2014). The study on the impact of virtual reality on e-commerce highlights the main paths leading to purchase intention: emotions from the VR experience influence the sense of presence and the desire to make a purchase; affect from the virtual environment leads to higher levels of brand awareness, also increasing purchase intention (Martínez-Navarro et al., 2019). It is important to note that design artifacts also play an important role in influencing purchase intention (Shen et al., 2021). According to previous studies, the following features can act as produce affective reactions in consumers of virtual worlds ~~can be identified~~: role-playing games and immersive activities (Jung et al., 2014), discovery of new products and interaction with people (Tran et al., 2011), telepresence (Jin et al., 2012).

### *Consumer behavior in virtual commerce*

Virtual reality is emerging as an important sales channel that requires understanding consumer behavior to tailor products, develop marketing strategies, and create in-demand products while considering the factors that influence purchase intent.

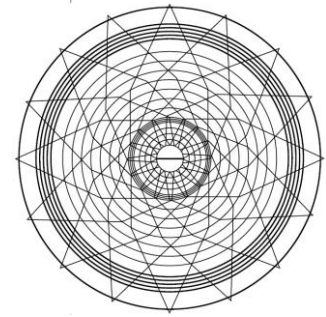
Previous studies on consumer behavior in virtual commerce describe the purchase decision through the five-stage classical consumer decision model (Zhang et al., 2016, pp.95–108). Most studies measure the purchase decision by the consumer's desire to purchase a product or service. Research shows that platform context (interactivity, engagement) contributes to a sense of flow (immersion, loss of time) in a virtual experience, which in turn influences the value of the virtual product and leads to purchase intention (Cheon, 2013, pp.315–330). The authors of previous studies identify in conceptual models the following indicators that have most influence consumer purchase intention: utilitarian value of the product, attitude towards technology (XR), level of pleasure (Lau et al., 2018), level of trust, attitude towards the product, satisfaction user, attitude towards the brand (Shen et al., 2021).

Consumer behavior research often uses the Stimulus-Organism-Response (SOR) model. This model studies the predicted behavior of users when using information technology (Chen et al., 2018, pp.1249–1262). “Stimulus” – external environmental stimuli as advertising in communication channels, brands, products, prices, store environment. The “organism” is the area in which a person consciously or unconsciously processes stimuli, where the process of change in beliefs, intentions, learning and impressions occurs. “Response” includes verbal, non-verbal and behavioral reactions. Purchasing

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behavior and intention are classified as responses to incentives in many studies (Peng et al., 2014; Zhu et al., 2020).

### *Metaverse as a brand extension tool*

Brand extension is a marketing strategy where a brand extends their positioning to other consumer categories and channels (Claire et al., 2021). Brand extension strategy is used by large companies. The goal of using this strategy is to generate positive consumer response in the new area by leveraging the brand's success in the old area.

Previous research identifies six main dimensions that make up the brand extension construct: trait-based fit (product shape, price, color identical to the parent brand), resource-based fit (financial, production, technological, intellectual and sales resources), and features fit (similar functionality), use case fit (similar use situations), image-based fit (similar consumer associations and values), and target market-based fit (ability to build your customer base) (Claire Deng et al., 2021). The study authors also emphasize that strict use of all six components leads to suboptimal solutions, so the combination of brand extension elements is individualized.

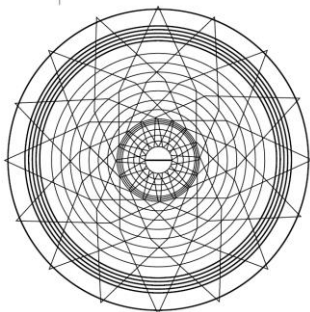
In the media space, there are more cases where companies and individuals use the metaverse as a brand extension tool, where the virtual world is a separate additional brand in the digital space (Bushell, 2022). Creating a world in the Metaverse as an extension of a brand is a case of extending a parent brand into the market for digital goods and services.

### *Features of gamified advertising in Metaverses*

Gamified advertising is a type of advertising that uses gaming technologies to promote products and services. Previous studies distinguish two types of such advertising: in-game advertising and advergames (van Berlo et al., 2022).

In-game advertising inserts advertising into existing games through banners and elements of the game world. Advertising games are created by brands to interact with customers through gaming content. Both types of gamified advertising can be considered a precursor to the Metaverse.

Analysis of a 2021 study found that users have more positive attitudes toward gamified advertising than real-life advertising, but consumers are less likely to recognize brands in a gamified environment (van Berlo et al., 2021). In-game advertising presents brands as attributes of users' identities, which helps reinforce the bond between brand and customer. When comparing the placement of advertising content in a gaming environment, previous research shows that the ability to interact with a brand has a better effect on brand awareness than advertising integrated into the background (Rifon et al., 2014). A study of in-game advertising in Second Life (a massively multiplayer computer



game) shows that players who notice brand promotion have positive attitudes towards in-game PR campaigns and sponsorships (Laskowska-Witek et al., 2014). Brand placement at more difficult levels of the game has a negative impact on cognitive perception as players are more focused on the game's objectives (Herrewijn et al., 2013). Also, the factor of combining the game and the brand has a positive effect on recognition (Vermeir et al., 2014).

An example of brand promotion in multi-user virtual worlds, in addition to the use of the digital landscape, is the holding of events and the organization of competitions, these tools are most positively perceived by consumers (Laskowska-Witek et al., 2014).

Experience with gamified advertising provides a foundation for exploring similar advertising tools in Metaverses. The main difference is that Metaverses are spaces created for brand purposes, while gamified advertising is integrated into existing games. This means that advertising in Metaverses may have different consumer reactions than advertising in multiplayer games.

**Conceptual model of brand promotion in Metaverses and Research questions**

The conceptual model of brand promotion in Metaverses (Figure 1), compiled from a literature review, is based on three key elements: virtual commerce, brand extension strategy and gamified advertising. These components focus on brand development, sales, and advertising.

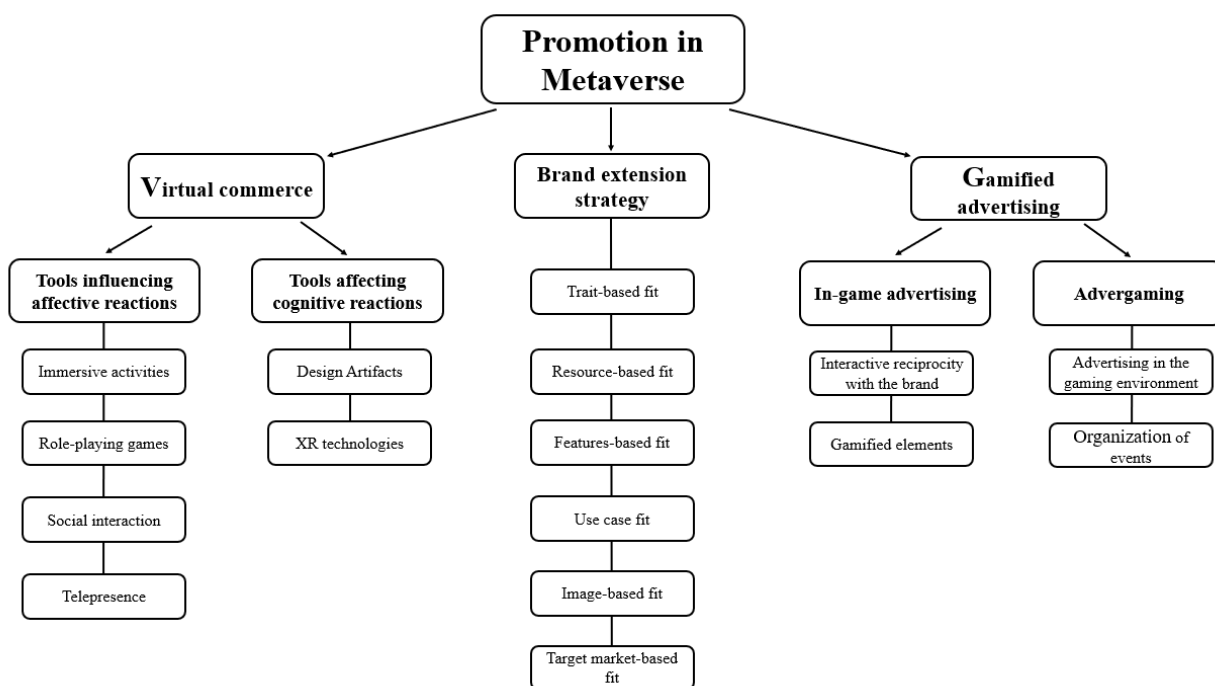
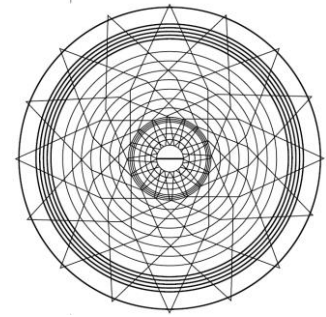


Figure 1. The conceptual model of brand promotion in Metaverses

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Virtual commerce uses extended reality (XR) devices to create immersive brand experiences and influences consumers' cognitive responses. Research in this area examines how virtual technologies and design artifacts influence purchase intentions and affective reactions such as enjoyment and satisfaction. Brand expansion and its strategy in the Metaverses is based on aspects that brands must consider when entering the virtual market. Experience with gamified advertising allows for development of advertising strategies in Metaverses using tools such as in-game advertising and game mechanics. However, these aspects require additional research in the context of Metaverses since consumer reactions in this space may be different.

The key limitation of these (reviewed) studies is that their conclusions are extrapolations from marketing experience in other virtual spaces. Thus, they cannot provide a reliable framework for brand promotion in Metaverse. Research in virtual commerce is based on the experience of virtual stores and games, which provide a much narrower consumer experience. Findings in consumer behavior highlight factors that influence purchase intention in virtual commerce, but not all of these factors are applicable to the Metaverse. Experience with gamified advertising is also limited to research in multiplayer games and advergames. The user experience in the Metaverse is unique, so existing promotion tools and effects require testing and adaptation. The purpose of this study is to identify promotion tools that are unique to Metaverse and test users' behavioral reactions to these tools.

In recent years, brands in the Metaverse have been seeking PR outreach. However, with the increasing use of this communication tool, it becomes clear that the mere presence of a brand in the Metaverse is no longer enough. In the future, the Metaverse will focus on marketing, advertising and branding, and therefore it is important to delve deeper into the effects of gamified advertising and virtual commerce on users. It is also necessary to understand how audiences respond to aspects of brand extension in this context.

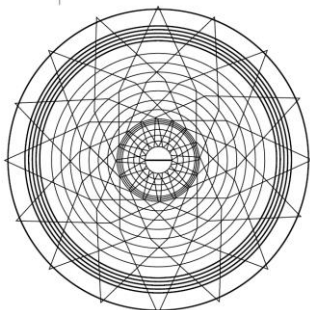
This work focuses on identifying brand promotion tools and describing consumer responses to these tools. Based on the literature review, the following research questions for the qualitative phase of the study were formulated:

RQ1: What brand promotion tools are used at this stage of Metaverse development and for what purposes?

RQ2: What are the drivers and barriers of the Metaverse as a channel of communication with a brand?

## **Methods and Quantitative Conceptual Framework**

*Justification of empirical investigation methodology*



This work has an exploratory design. Exploratory design involves a qualitative phase followed by a quantitative phase (Creswell et al., 2011).

To answer the first two research questions, in-depth interviews were conducted among seven Russian specialists, experts and CEOs working in companies or agencies that have various experiences with Metaverses. Namely the agencies Venera Metaverse, Maff, VOVA family, INITS and the Sense Tower company. All agencies are engaged in the integration of brands into the Metaverse, and Sense Tower is developing a platform for the Russian Metaverse. The interviews were conducted to identify the features of business and communication between the brand and the consumer in the Metaverse, as well as to identify promotion tools in this communication channel.

Based on the results of the thematic analysis (Table 1), general conclusions were drawn from the qualitative stage. After identifying the variables for the quantitative phase of the study, additional research questions were formulated, and hypotheses were developed.

**Table 1.** Code table

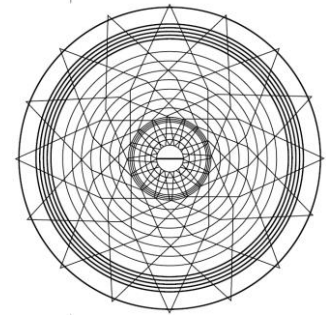
Drivers of Metaverse					
Simple user path	Competitive element	Attractiveness of the gaming world	Raising themes that highlight brand values	The presence of elements that represent the brand	
"It's good to keep the project very simple, just make a small, simple, understandable copy of your store. But in any case, some kind of gamification is needed."	"They made it interesting, they added a competitive element - very good."	"...it's very important that the game is enjoyable. If you don't like it within 50 seconds, you leave. It's important that the game is immediately captivating and immersive."	"...it's cool that during the game they teach city residents to respect nature. Thus, the company immediately closed PR, corporate team building, and all this under the auspices of ecology."	"... the world of the Hyundai company in Roblox is a space in which the user gets acquainted with products, gets acquainted with different types of cars, can test them, can take part in races, get acquainted with the ideology of the company and can go to special areas that tell about some conceptual stories."	



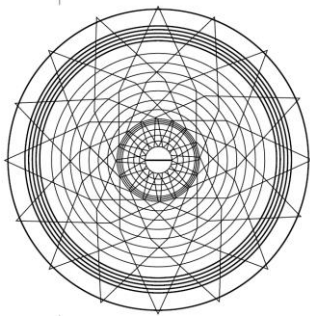
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<p>“It is very important to think through the user’s path so that he understands what is being offered to him. The sequence of steps is not even so much gamification, because gamification is precisely about some kind of game component. And I mean such a user path so that he simply did not get lost in this space, and it was clear to him how and what would happen.”</p>	<p>“For many users it is important to become a winner, to be first on the leaderboard, and so on.”</p>	<p>“The first is the graphics and the musical component. Well, as in any project on YouTube and Instagram, the visual part plays a big role.”</p>	<p>“For example, H&amp;M had a case in Roblox. It was called Looktopia. The user ran around, collected clothes, recycled them and got new merchandise, but only then could he see that it was even from H&amp;M.”</p>	<p>“The international dating service Dating.com set up a virtual registry office in which users could have a virtual wedding, which increased audience loyalty.”</p>	
<b>Barriers of Metaverse</b>					
<b>Misunderstanding of the target audience</b>	<b>Wrong choice of platform</b>	<b>Inconsistency with the expectations of site users</b>	<b>Misunderstanding of technical support</b>		
<p>“When we were making a story-based game for the Samsung IT school, we offered to play it in test mode for both adults and children. We played it for probably 40 minutes. This despite the fact that I fully knew what the game consisted of. And some children completed this game in 20 minutes. Their thinking,</p>	<p>“...and the first thing is to understand very correctly what kind of business, what platform is suitable for. If I give examples, it could be a gaming experience, or maybe, for example, a business that is engaged in</p>	<p>“In Roblox, one of the main parameters is a freebie. That is, if some brand is placed, it must provide some kind of lead magnet, some kind of free skin. It is clear that you need to fight for it, you need to win it. But, nevertheless, they must definitely give it. Then there</p>	<p>“...just technically, something doesn't work, there was supposed to be a concert, but it didn't happen, the avatar didn't come out or came out with a delay.”</p>		



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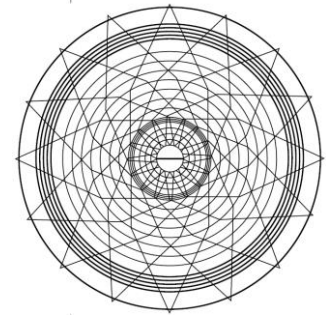
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<p>psychology and interaction with gadgets work completely differently. This is very important to take into account."</p>	<p>the construction of buildings. For them, the task will be to create a showroom for your objects in the metaverse. And this requires very different approaches."</p>	<p>will be a lot of audience, then there will be a lot of users entering this space. But some companies do not do this. That is, they simply create their own world in the same Roblox and do not give anything to users, thereby making a big mistake. "</p>			
<p>"Difficulties arise when they don't understand what their audience is. If there is a misunderstanding of the audience, then no, there will be no result."</p>	<p>"For example, if it's Roblox, then you can't integrate links there. And for many brands, it's very important to create a conversion to the site or some other channels and lead users from the Metaverse to their usual channels."</p>		<p>"...we invite a bunch of people to the browser-based metaverse, and accordingly, our servers are based on this particular metaverse. The computer simply won't take us out. And we don't take away any positive experiences from this space."</p>		
<b>Brand Promotion Tools</b>					
<b>Events</b>	<b>Using landscape (banners, billboards, push notifications )</b>	<b>Creating accessories for an avatar on the platform</b>	<b>Product testing</b>	<b>Product placement</b>	<b>Promotional codes, discounts, bonuses, points</b>

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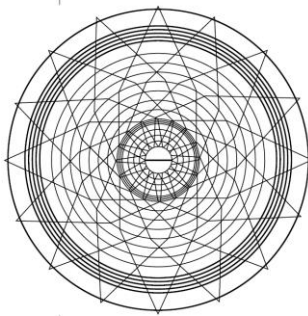
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<p>"You can even hold an event that attracts an audience one-time to bring it to the top of the Metaverse."</p>	<p>"...make banners and buy advertising, just like in real life billboards, signs, advertising on buildings."</p>	<p>"...if brands manage to collaborate with the Metaverse itself and release clothes there, then this is a very good way of promotion, because through these clothes you can then go into the world and attract an audience."</p>	<p>"Game mechanics are the main promotion tool. That is, it could be a game where you test a brand's products, for example, grill steaks."</p>	<p>"...you can create some special items, which can also be some kind of advertising analogue."</p>	<p>"If we want to receive specific clients, then here we can already use promo codes, bonuses, discounts. So the user stays in this location for as long as possible, collects as many coins and points as possible and then exchanges this for a real discount in real store."</p>
<p>"All sorts of events are a very good solution. I think they attract the most people."</p>	<p>"...you can sell advertising surfaces and thus also attract attention, for example, an airplane is flying and there is advertising on it."</p>	<p>"Items of clothing and some kind of achievements are very important for users. It's like a virtual social status and brands willingly take advantage of it."</p>	<p>"If it was some kind of consumer product, for example, Heineken and Absolut entered the metaverse and you could try the products."</p>	<p>"Native advertising works well by placing branded items in different spaces, in different metaverses"</p>	
	<p>"Push notifications that can talk about some new product from the brand work well."</p>				

The quantitative phase of the study involved an online survey among active Metaverse users interested in interacting with brands. The survey was distributed among



communities of users of various Metaverse platforms in the Telegram messenger, the VK social network and in the Discord servers.

*Survey and Analysis conceptual framework*

The survey consisted of seven main blocks, six of which corresponded to the promotion tools identified in the qualitative stage; consumer reactions to these tools were evaluated. The seventh block included demographic questions to enable a detailed description of the consumer's portrait. Measures of experiences and reactions were provided to respondents as statements and rated using a seven-point Likert scale (Joshi et al., 2015). To assess consumer reactions, the SOR model was used, where the stimulus is a promotion tool, the organism is the respondent's affective responses, and the reaction is a behavioral reaction. To better assess reactions to a promotion tool, it is necessary to assess the overall level of satisfaction with the experience on the Metaverse platform, this will allow us to separate the reaction to the experience on the Metaverse platform as a whole from the reaction to the tools. Overall satisfaction was assessed using indicators of drivers and barriers identified in the qualitative phase of the study. Affective reactions refer to the processing of a stimulus, which includes the formation of beliefs, impressions, and emotional responses. Affective reactions were measured using indicators of the level of pleasure, level of trust, attitude towards the brand, and purchase intention. To test the relationship between promotion tools and drivers, the Spearman correlation coefficient was used. The Wilcoxon signed-rank test was used to compare native and interactive tools with respect to effects on affective and behavioral responses (Figure 2).

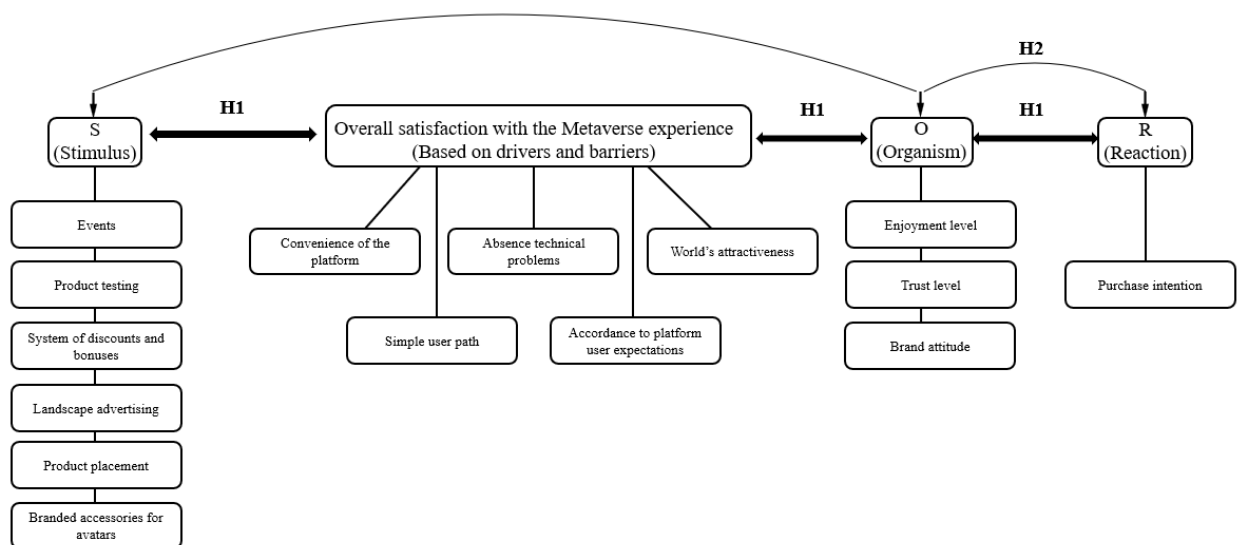
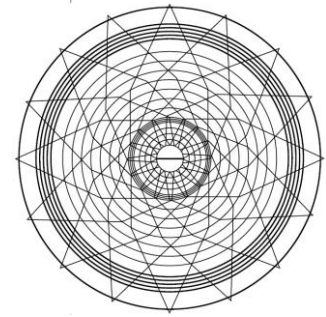


Figure 2. Survey Conceptual Model

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## **Qualitative Results and Hypothesis Development**

### *Findings of qualitative part*

Based on the results of the thematic analysis, the research questions of the qualitative part of the study can be answered.

In Russian Metaverses at this stage of development, six main categories of brand promotion tools are used, which can be divided into two groups: interactive and native. Interactive events include events, product testing, a system of discounts and bonuses. Native tools include landscape advertising, product placement and branded accessories.

The main drivers and barriers of the Metaverse as a channel of communication with the brand were also highlighted. Barriers include incorrect choice of target audience and platform, failure to meet user expectations of the site, and technical errors. The drivers are the construction of a simple user path, the presence of a competitive game element, the attractiveness of the game world, the presence of themes that support the brand values and the presence of elements associated with the brand.

Based on the results of the qualitative part of the study, the following research questions for the quantitative stage can be formulated:

RQ3: For which brand promotion tools are the drivers and barriers of the Metaverse as a communication channel most significantly related to affective and behavioral reactions?

RQ4: Is there a difference in target audience's affective and behavioral reactions to interactive or native brand promotional tools?

### **Construction of hypothesis**

Thus, the following hypotheses can be put forward:

H1. For interactive tools, affective and behavioral responses are most related to the drivers and barriers of the Metaverse.

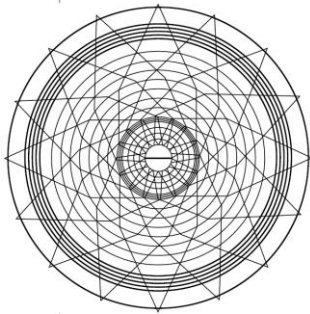
The hypothesis is due to the risks of negative user experience when using interactive promotion tools. Users expect a lot from interactive tools, which are actively discussed in the media and the attention of brands is focused on them.

H2. Interactive branding tools elicit more positive affective and behavioral responses.

The hypothesis builds on previous research in virtual commerce, emphasizing that the pleasure motivators influencing purchase intention are related to online social interaction and product interaction.

### **Correlation analysis and results of quantitative research part**

122 respondents took part in the survey. Based on the socio-demographic characteristics of the participants, a portrait of the audience was compiled. The gender



distribution is close to the Russian population - 53% women and 47% men. Respondents were divided into four age groups: 18-24 (75%), 25-34 (18%), 35-44 (6%), 44-55 (1%). The majority of respondents live in cities with a population of more than five million people (74%), 22% of respondents live in cities with a population of more than one million people, 4% live in cities with a population of less than one million people. 24% of respondents are in the process of studying at the university, 27% are studying at a higher educational institution and working, 30% are employed, 7% are business managers, 7% are studying at school, 5% are not studying and not working. 1% of the audience has low income, 41% have below average income, 25% have average income, 20% have above average income and 13% of respondents have high income.

In addition to socio-demographic characteristics, it is important to pay attention to the number of respondents interacting with different tools. 68% of respondents have participated in events in the Metaverse, 79% have interacted with advertising embedded in the world landscape, 60% have used branded accessories for their avatar, 60% have had experience testing a product in the Metaverse, 54% have experienced product placement, and 64% received bonuses in the worlds of brands.

Reliability testing of the questionnaire items using Cronbach's Alpha showed an excellent fit of  $\alpha=0.981$

### **The relationship of drivers and barriers with affective and behavioral reactions**

Spearman's correlation coefficient was used to test the correlation between each driver and barrier and each response.

#### *Relationship between drivers and barriers and reactions to events in Metaverse*

Fairly strong connections were established in the overall assessment of drivers and barriers with all affective and behavioral reactions when participating in the event. It can be noted that the assessment of the attractiveness of the world is accompanied by a more positive level of pleasure (correlation coefficient = 0.768) and level of trust in the brand (correlation coefficient = 0.638). The convenience of the platform is most closely related to the brand's perception of caring about the consumer (correlation coefficient = 0.680), which reinforces the level of trust. Compliance with expectations from the event is accompanied by the highest level of attitude towards the brand (correlation coefficient = 0.629) and intention to purchase a product or service (correlation coefficient = 0.710).

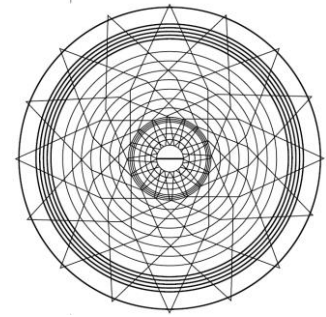
#### *Relationship between drivers and barriers and reactions from product testing experience*

Moderate connections were established for the overall assessment of drivers and barriers with all affective and behavioral reactions during the product testing experience. Compliance with consumer expectations from testing is most associated with level of

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enjoyment (correlation coefficient = 0.658), positive attitude towards the brand (correlation coefficient = 0.561) and purchase intention (correlation coefficient = 0.408). The attractiveness of the world most strongly contributes to brand trust (correlation coefficient = 0.588) and the feeling of care for the consumer (correlation coefficient = 0.473) (*The relationship between drivers and barriers and reactions from the experience of receiving bonuses*

Strong connections were established in the overall assessment of drivers and barriers with all affective and moderate connections with behavioral reactions when receiving bonuses and discounts in the world of the brand. The attractiveness of the world is most accompanied by a high level of consumer satisfaction (correlation coefficient = 0.780), level of trust in the brand (correlation coefficient = 0.782), a sense of care for the consumer (correlation coefficient = 0.769) and a positive attitude towards the brand (correlation coefficient = 0.774). And compliance with consumer expectations is most closely related to purchase intention (correlation coefficient = 0.550).

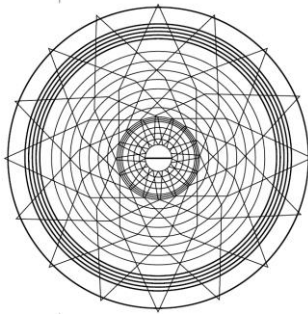
*The relationship of drivers and barriers with reactions from interaction with landscape advertising*

Moderate connections were established for the overall assessment of drivers and barriers with all affective and behavioral reactions when interacting with landscape advertising. The attractiveness of the world most contributes to more positive behavioral and affective reactions: a high level of user pleasure (correlation coefficient = 0.537), trust in the brand (correlation coefficient = 0.550), a sense of care for the consumer (correlation coefficient = 0.533), positive attitude towards the brand (correlation coefficient = 0.533) and purchase intention (correlation coefficient = 0.371).

*The relationship of drivers and barriers with reactions from interaction with branded accessories for an avatar*

Fairly strong connections were established in the overall assessment of drivers and barriers with all affective and behavioral reactions when interacting with branded accessories for the avatar. The attractiveness of an accessory is most closely accompanied by user satisfaction (correlation coefficient = 0.753), positive attitude towards the brand (correlation coefficient = 0.773) and purchase intention (correlation coefficient = 0.521). The correspondence of the accessory to the respondent's expectations is most positively related to the level of trust in the brand (correlation coefficient = 0.705) and the feeling of care for the consumer (correlation coefficient = 0.773).

*The relationship between drivers and barriers and reactions from interaction with product placement*



Moderate connections were established for the overall assessment of drivers and barriers with all affective and behavioral reactions when interacting with branded props in the world environment. The attractiveness of the world is most strongly associated with respondents' high levels of satisfaction (correlation coefficient = 0.570), feelings of care for users (correlation coefficient = 0.376), positive attitude towards the brand (correlation coefficient = 0.615) and purchase intention (correlation coefficient = 0.327). Meeting expectations is most closely related to brand trust (correlation coefficient = 0.437).

### **Comparison of reactions to interactive and native brand promotion tools**

Using the Wilcoxon signed-rank test, interactive instruments were compared in pairs with native ones. The variable used for comparison is the subjective assessment of the degree of affective and behavioral reactions from interaction with the tools. Results indicated significant differences in the positivity of perception of the tools.

#### *Comparison by level of pleasure*

Tools such as branded accessories and bonus programs elicited the most pleasure in the respondents. Advertising built into the landscape of the Metaverse world was found to be least enjoyable for the respondents.

#### *Comparison by level of brand trust*

Landscape advertising has the least impact on consumer confidence. Apart from advertising built into the landscape, there is no significant difference in the impact on consumer trust between native and interactive tools.

#### *Comparison by level of positive attitude towards the brand*

Advertising built into the landscape causes the least positive attitude towards the brand compared to all interactive tools. However, for this affective response, interactions with branded avatar accessories induce more positive brand attitudes than events. The experience of receiving discounts and bonuses in Metaverses promotes a more positive attitude towards the brand than product placement.

#### *Comparison by purchase intent level*

In terms of behavioral response, landscape advertising has the least impact on purchase intent compared to events, rewards, and product testing. Branded avatar accessories generate higher purchase intent than Metaverse events. There are no significant differences between other interactive and native tools.

### **Final conclusions of the quantitative stage of the study**

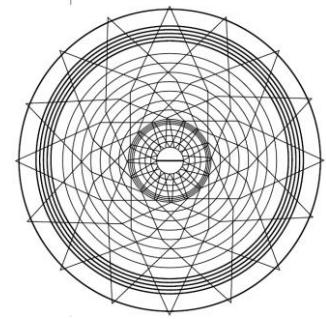
H1 is partially confirmed, since correlations of drivers and barriers with affective and behavioral reactions are observed for all brand promotion tools. However, interactive



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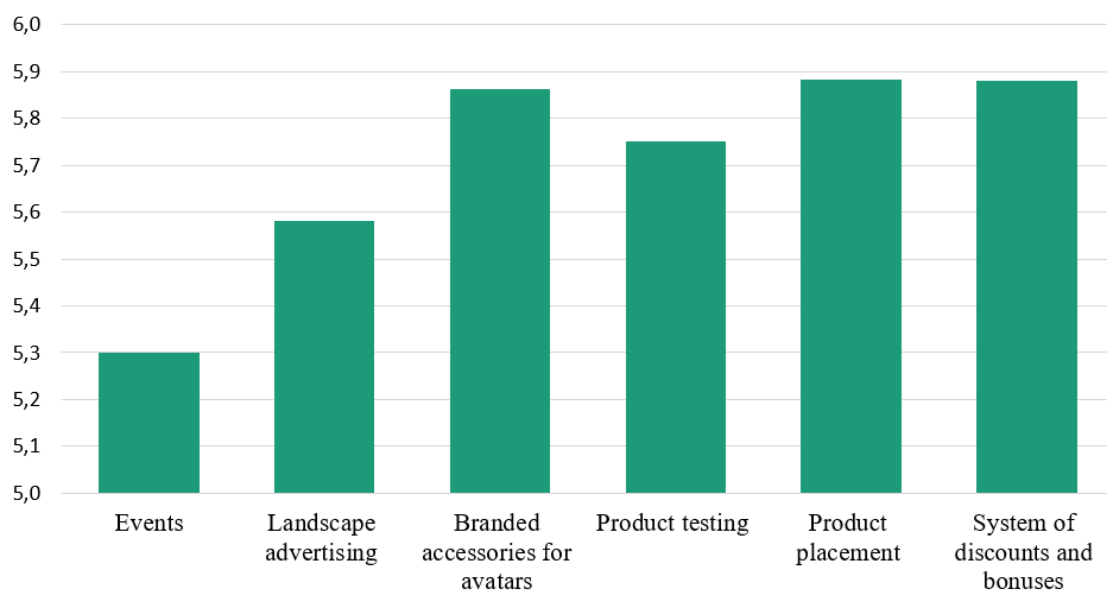


tools such as events and bonus systems show stronger correlations. Product testing, in turn, shows more moderate relationships. Native tools, such as product placement and landscape advertising, also show moderate correlations, and in many respects they are weaker than the correlations of all native tools. However, correlations for the native branded avatar accessories tool are for the most part strong.

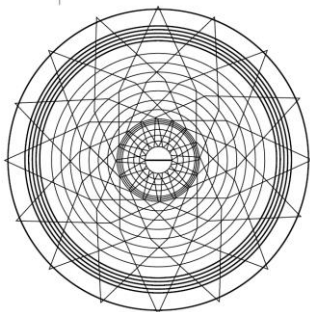
H2 is partially supported, as for the most part there are no differences in the impact on users' affective and behavioral responses between interactive and native tools, but landscape advertising in the category of native tools has the least impact on affective and behavioral reactions compared to interactive tools. Bonus and discount programs, in turn, cause greater pleasure and a positive attitude towards the brand than native promotion tools.

However, branded avatar accessories have an increased impact on enjoyment, brand attitude, and intention to purchase compared to some online tools. Events, in turn, generate lower purchase intent than branded accessories and have the least impact on affective and behavioral responses compared to other interactive tools. Thus, among the interactive tools, we can single out the bonus system as the most impactful on affective and behavioral reactions, and activities as the least impactful tool.

However, in terms of overall user satisfaction, events have the lowest score among all tools (Figure 3), this may be due to events being a broad tool that have more risks associated with negative user experiences, therefore, the comparison may not be fully relevant with other tools. Among native tools, we can highlight branded accessories as the most impactful tool, and landscape advertising as the least impactful.



**Figure 3.** Overall satisfaction with the platform when interacting with promotion tools



### **Conclusion and Discussion**

This study was dedicated to the study of brand promotion tools in Metaverses. The study was conducted within a mixed methodology using an exploratory design. The qualitative study involved seven expert interviews with experts in the field of Metaverses. Based on the results of the thematic analysis of in-depth interviews, six brand promotion tools were identified. The tools were divided into two groups: interactive and native. The main drivers and barriers of the Metaverse were also identified.

Based on the results of the qualitative study, hypotheses were formulated for the quantitative stage. The relationship between drivers and barriers for native and interactive promotion tools was tested, and behavioral and affective reactions to both groups were compared. The quantitative study was conducted among active users of the Metaverse; 122 people took part in the survey.

One limitation of the study is the breadth of the intervention instrument, such as events. Due to the variations and capabilities of this tool, it is different from other identified tools that are built into the world or platform of the Metaverse. Thus, the results for this instrument may not be fully relevant because they are generalized. The second limitation is the geography of the study; the sample is limited to Russia.

There are several possible directions for future research based on the conceptual model developed through the literature review. Future work could focus on identifying the characteristics of consumer behavior in Metaverses, evaluating the effectiveness of virtual commerce tools on consumers' affective reactions in the Metaverse, studying audience attitudes towards various aspects of brand extension in the Metaverse, and testing the effects of gamified elements in the Metaverse on users. A deeper study of events as a brand promotion tool is also possible: identifying the elements and mechanics that evoke positive affective and behavioral reactions within the tool. It is worth extrapolating the data to consumer responses in other countries and testing it globally.

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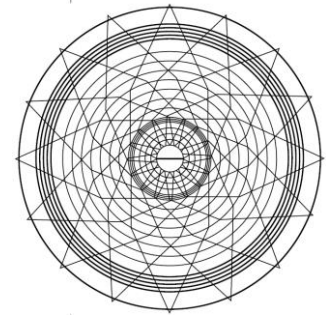
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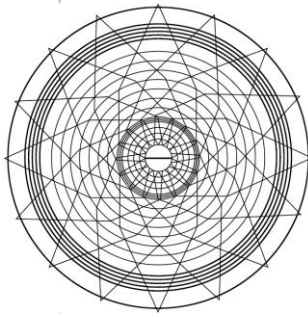
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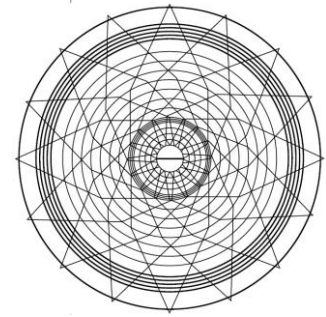
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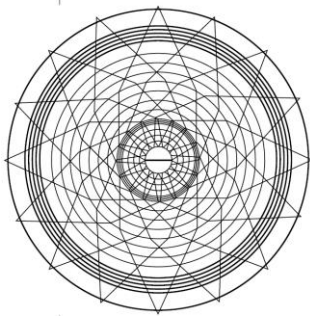
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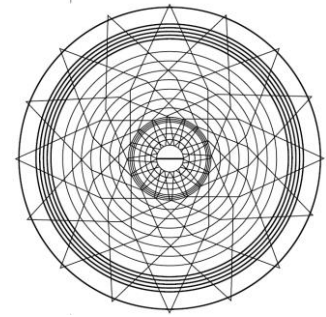
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## ИНСТРУМЕНТЫ ПРОДВИЖЕНИЯ БРЕНДОВ В МЕТАВСЕЛЕННЫХ

### **Сизикова А.**

Проектный менеджер, Nomad Art Kazakhstan

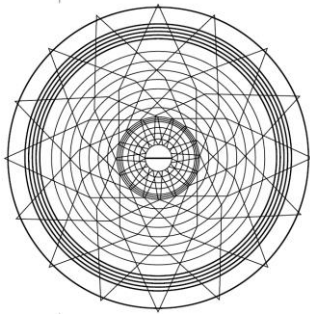
(Алматы, Республика Казахстан)

[anastasiaa.sizikova@gmail.com](mailto:anastasiaa.sizikova@gmail.com)

### **Аннотация:**

Метавселенная — это новая иммерсивная технология, которая имеет тенденцию стать новой платформой для брендинга, маркетинга и рекламных кампаний. Данное исследование направлено на изучение процесса продвижения брендов в Метавселенных в связи с ограниченностью исследований по этой теме. Большая часть текущих исследований основана на аналогичных виртуальных пространствах, а это означает, что их данные и выводы могут быть не полностью применимы к Метавселенной. Это исследование направлено на определение инструментов продвижения брендов и изучение поведенческих реакций потребителей на эти инструменты. В исследовании использовалась смешанная методология. Качественный этап исследования включал интервьюирование экспертов российских маркетинговых агентств, специализирующихся на интеграции брендов в Метавселенные. Целью интервью было выявить текущие инструменты продвижения, используемые в индустрии Метавселенной для интеграции брендов в Метавселенную, а также определить драйверы и барьеры, с которыми сталкиваются эксперты.

Количественной частью исследования стал онлайн-опрос, который был проведен среди 122 активных русскоязычных пользователей Метавселенной. Результаты опроса были использованы для оценки поведенческих и аффективных реакций потребителей на инструменты продвижения, а также для проверки связи драйверов и барьеров Метавселенной с инструментами продвижения. По результатам были определены шесть основных инструментов продвижения, которые были разделены на две группы: интерактивные и нативные. Также были выявлены связи между инструментами продвижения, драйверами и барьерами, изучены поведенческие и аффективные реакции пользователей на инструменты продвижения бренда в Метавселенной. Два интерактивных инструмента (мероприятия, система бонусов) имели более сильную корреляцию с драйверами и барьерами, чем два нативных инструмента (ландшафтная реклама, продакт-плейсмент). Однако один нативный инструмент (фирменные аксессуары для аватаров) продемонстрировал корреляцию,



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сравнимую с двумя интерактивными инструментами. Не было выявлено существенных различий между интерактивными и нативными инструментами по влиянию на аффективные и поведенческие реакции. Однако интерактивные инструменты, такие как бонусы и тестирование продуктов, а также собственные инструменты, такие как фирменные аксессуары для аватаров, были оценены как наиболее вероятно вызывающие положительную реакцию потребителей.

**Ключевые слова:** метавселенная, продвижение брендов, маркетинговые коммуникации, виртуальная