

The Age Beyond Sports: User Experience in the World of Metaverse

Gülsüm Demir

Faculty of Sports Sciences, Department of
Sports Management and Recreation
Eskişehir Technical University,
Eskişehir/Turkey
gulsumtopal26@gmail.com
0000-0003-3542-2409

Metin Argan

Faculty of Sports Sciences, Department of
Sports Management
Eskişehir Technical University,
Eskişehir/Turkey
margan@eskisehir.edu.tr
0000-0002-9570-0469

Halime Dinç

Faculty of Sports Sciences, Department of
Recreation
Afyon Kocatepe University,
Afyon/Turkey
halimedinc@yandex.com
0000-0002-2391-5508

Abstract—A platform for augmented reality called Metaverse enables users to build interactive experiences that combine the virtual and real worlds. Additionally, it can be considered a virtual version of the concept or idea of cyberspace. People have many alternative options in Metaverse but they mostly use their choice by gaming. Therefore, this study examining the opinions of the participants who experienced the Nikeland sports game, which is the initiative of the Nike sports brand in the metaverse. Within the scope of the research, semi-structured interviews were conducted with the participants who experienced the Nikeland game. Seven themes were obtained: the age beyond sports, atmospheric, feelings, chaotic structure in access, flow, perception of reality and innovative brand in this research. As a result of the findings, although the game initiative of the Nike brand in the metaverse is still in its infancy, it has been seen that there is a belief that this initiative will come to better places in the future. As a consequent of the literature review of the metaverse and the opinions of the users who have experienced the Nikeland game, the researchers have obtained results that the concepts of sports and metaverse are not far from each other and that the sports brands in the metaverse will increase.

Keywords— Metaverse, Nike, Nikeland, experience, gaming experience

I. INTRODUCTION

Humanity face many challenges within so far. These are wars, natural disasters, pandemics and a lot of cases. In 2020 world culture has moved away from being face to face because of coronavirus pandemic. As a result, new paradigms that are not face-to-face and in which new technologies are used have settled among cultures [1]. These changes in the world have affected the purchasing habits of consumers, the way they interact with each other, the way they socialize, their working structure and shopping characteristics. The trend towards virtual markets has increased. Consumers are oriented towards new experiences. These changes, which started in the market, are followed by businesses. Businesses have begun to exist not only in physical markets but also in virtual markets in order to gain an advantage over their competitors. Brands that adopt a technology-supported process plan their steps to communicate with their stakeholders in the metaverse universe, which is a new market. Staying out of this new world established in the Metaverse can pose a threat to businesses [2]. Considering the huge industry of sports, it is thought that sports brands and sports consumers will also play an active role in the metaverse world. It is thought that one of the areas that Metaverse will focus on in the near future will be sports applications.

Damar [3] analyzed 93 metaverse themed publications covering the years 1990-2021 in the Web of Science database. When these publications are evaluated according to research

areas, it is seen that almost half of the researches are in the field of computer science. After computer science, the concept of metaverse has been discussed in many other fields such as engineering, educational research, psychology, art, business economics, information technologies, respectively. In this research, a metaverse-themed study in the field of sports could not be reached. While it is possible to reach academic publications on the concept of metaverse in many fields of study, studies that include the existence of a sports brand in the metaverse and the experiences of sports consumers in the metaverse world have not been found. In the article of Hollensen et al. [4], a case study was conducted on Nikeland in the metaverse. An experiential study about Nike's attempt in the metaverse universe could not be found in the literature. For this reason, the aim of this study is to reveal the experiences of the people participating in the sports game in the metaverse. Opinions of individuals who experienced Nike's game Nikeland in the metaverse were received through face-to-face and one-on-one interviews in a zoom environment. One of the important question about Metaverse is "What if virtual World more attractive than real for someone?". In his work Bojic (2022) discussed that power and addictions are strongly interconnected in today's world. For example, the special power of tech companies is closely tied to addiction, as structuring the experience of online users influences their behavior and actions. The capability to make people even slightly addicted to a product or service gives significant societal influence to a company that controls it. However, aside from financial assets, big tech companies also possess platform, media, and rule-setting powers. In the end, it is important to note that "media power" is much greater than before the appearance of the Internet and smartphones, as this new state of things means choosing not only news and entertainment for their users but also a merger of social media and other kinds of personal communication with AI algorithms capable of delivering individually effective recommendations. Opinions of individuals who experienced Nike's game Nikeland in the metaverse were received through face-to-face and one-on-one interviews in a zoom environment.

As a result of this study, the theoretical knowledge in the literature in the field of metaverse and sports will be expanded, and at the same time, the themes that sports brands should focus on while designing such games will be determined. Individuals want to gain experience in the metaverse and enjoy these experiences. It will be useful for sports brands, who want to be in Metaverse by targeting the z generation, to

know the factors or themes obtained from these experiences in their initiatives such as games. With this information, sports brands can take initiatives that are more creative, interesting and will bring their brands to the fore.

A. Metaverse

The word metaverse is a combination of the prefix "meta" (meaning beyond) and the suffix "verse" (short for universe). So metaverse literally means a universe beyond the physical world. Science fiction writer Neal Stephenson, who coined the term in his novel "SnowCrash" published in 1992, defined people as avatars who interact with each other in an immersive world in the understanding of the metaverse. The metaverse, constructed by Stephenson, is an extremely large and densely populated virtual world parallel to the physical world [5]. Kim [6], summarized the common features of many definitions of the metaverse as follows; Persistence of identity and objects, a shared environment, use of avatars (embodied self), synchronization, three-dimensional (or virtual), interoperability, an interactive, immersive and social user experience.

The metaverse, which has 30 years of conceptual history, has increased its popularity with the emergence of technological developments such as the internet of things (IoT), three-dimensional (3D) software, blockchain-based technological infrastructures (Non-Fungible Tokens (NFT), cryptocurrencies, etc.) [7]. In addition to technological developments, the metaverse has also increased its popularity, especially during the coronavirus pandemic, with people shifting their activities to online environments. Although virtual reality has been exploited as a concept throughout the 1980s as in technoscience and in literary works, the term "metaverse" was coined in the science fiction book Snow Crash [9]. The story depicted the interaction of humans through avatars on the street, which was space owned by a single corporation. After that point, there have been many stories, films, and other pieces of art and entertainment related to virtual worlds and the struggle between dystopian control of machines and human anarchist-survivalists. In September 2021, Facebook founder Mark Zuckerberg announced that Facebook's vision would revolve around the project of building an extremely ambitious "metaverse", and that its icons would turn into infinity signs, thus shifting everyone's attention to the metaverse. The concept of metaverse has become a subject discussed in our daily lives and this concept has begun to be questioned more [8]. Significant investments in the metaverse by leading tech companies, measured in billions of dollars, indicate that humanity's next emerging global trend is on the horizon. Presented as the future of the Internet, the metaverse is a combination of different virtual spaces united in a 3D universe, empowering its users to work, meet, game, and socialize.

Individuals use VR (virtual reality) glasses, which are frequently used today, in order to exist in the virtual world with their specially created avatars. The Virtual Reality (VR) experience allows individuals to spend hours in immersive virtual environments and interact with content in a world that provides the illusion of an alternate reality. Virtual Reality (VR) is currently discussed as the premier consumer technology to provide an escape to an alternative virtual

world. This equipment plays a prominent role in providing consumers with experience in the metaverse universe. Previous studies investigating consumer experiences with VR have generally revealed that VR experience increases users' pleasure and behavioral intentions as a result of escaping from the real world [9]. As a marketing tool, VR can help create memorable shopping experiences. While creating satisfaction for users, the flow state during the experience can increase their level of escape from the real world and pleasure, which can intensify the user's emotional experiences (Yee 2006) [10]. Recognizing the positive and negative experiences of VR in sports consumers can contribute to future VR-based sports marketing steps.

All these developments today have made it necessary for brands to keep up with the change. Innovative brands have taken their place in the metaverse world in order to increase their visibility, provide competitive advantage, reach new audiences, increase income sources, and capture consumer preferences. The virtual world gives marketing an interdisciplinary, expansionist, cross-border, boldly exploring, exploring and mastering perspective in new places [11].

Newzoo which is the world's most trusted and quoted source for games market insights and analytics in 2021 mentioned that "Music, TV-film, fashion, cosmetics, sports, education, art, fast moving consumer goods sector, automotive, tourism, retail, factories and offices are among the sectors where metaverse-based technologies are first used" [12]. It is thought that the stepping into the metaverse world of sports businesses will not only provide positive returns to the sports brand at the moment, but also will provide investments for the future target audience. It is thought that creating good experiences for users and target audience after sports brands place themselves in the metaverse field early will have a great impact on brand awareness and image in the long term. Sports marketers need to act at the speed of their customers. It is also believed that Metaverse could be an excellent opportunity for marketing. A brand whose target audience consists of young people will be in direct contact with young people in the metaverse universe [13]. Some of the sports brands that have started to invest in Metaverse are brands such as Nike, Adidas, Skechers, FC Barcelona, Manchester City, Vans, NFL.

B. Gaming Experience in Metaverse

New types of experience are emerging with new technologies. Experiences have differentiated with today's virtual environments and therefore it has become a subject that needs to be re-discovered. Metaverse, which is the newest of these online environments and one of the environments that needs to be explored the most, offers many new experiences to its users. One of the most important of these experiences is the game experience in the metaverse. Today, brands take action to promote their products and services in virtual environments. This understanding, called virtual experiential marketing, is the realization of experiential marketing practices in virtual environments [14]. Luo et al. [15] identified the dimensions of virtual experiential marketing as sensory, interaction, pleasure, flow and community relations. Positive attitudes towards the business, its products and

Demir et al.

services develop when a virtual experience appeals to the consumer's senses, interaction, pleasure, flow and community relations. These positive attitudes also increase the loyalty of the participants to the brand. The contents of these dimensions are as follows; Sensory experiences are experiences that appeal to people's vision and senses in virtual environments. Interaction experiences are experiences such as two-way communication and synchronicity. Pleasure experience is an individual's experience of feeling good, satisfied, and happy. Flow experience is the experience of people forgetting themselves and time in a virtual environment and being in a positive mood. Community relations experience, on the other hand, is social experiences such as sharing, making recommendations about products, services or virtual events in communities in virtual environments [16].

C. Nikeland(Airtopia)

Metaverse platforms such as Zepeto, Roblox, Gather.town, and Fortnite can be classified as "virtual worlds".



Fig. 1. Screenshot of basic platforms in Metaverse

It can be seen that the four metaverse platforms described in Figure 1 have a large number of users globally. In addition to their reputation, many brands that use the metaverse to promote their products or services take their place on these platforms [17]. It is thought that consumers spend \$178 billion on paid video games on these platforms in 2020, and therefore players are ready to spend their money online. About 75% of this industry's revenue comes from games that allow the sale of virtual goods such as clothes for players' avatars [18].

Nike announced Nikeland, which it founded in Roblox, in November of 2021. Roblox, a metaverse-featured video game platform, has a significant market share in the gaming industry with 47 million daily active users. It has been determined that the number of users following the games on Roblox has increased by over 19 percent compared to 2019 [19]. "Nikeland" features a virtual replica of Nike's headquarters in Beaverton, Oregon. Nikeland is a new place on Roblox for Nike to connect with fans, share experiences and compete with each other. In the metaverse world, inside the 3D space of Roblox, Nike created Nikeland based on its goal of transforming sports and gaming into a lifestyle. Some of the services provided by Nikeland in Metaverse to Nike users are listed below.

Designing of sports games: Nike's headquarters has been transformed into "Nikeland," a place where competition and creativity abound for everyone. Buildings and locations within Nikeland are inspired by Nike's real-life headquarters.

Nikeland visitors can participate in sports games here with their friends. With Nikeland toolkits, content creators can easily design their own interactive sports games from interactive sports materials. Creativity is unlimited.



Fig. 2. Nikeland screenshot



Fig. 3. Nikeland running tracks screenshot

Adapting real-life movements into online play: Nikeland is enriched with real-life movements that encourage their visitors to be more active. Nikeland visitors can use the accelerometers on their mobile devices to transfer their real-life movements into the game. For example, these devices are used to perform in-game movements such as long jumps or sprints.



Fig. 4. Screenshot of Nikeland showroom

Using virtual Nike products: A digital showroom allows the possibility to equip the Nikeland avatar with exclusive Nike products. You can browse the showroom and choose shoes, clothes and accessories to dress the virtual avatars. For example, popular classics such as Air Force and Nike Blazer and all other Nike apparel are available in the showroom.

Accessibility for everyone: Visitors who access Nikeland from all over the world have free access to all Nike products

and equipment. This feature eliminates access which is one of the biggest obstacles to sports. These experiences offered by Nike are free for now. Nikeland is supported and enlivened by the limitless creativity of its visitors. Players are rewarded with Blue Ribbons and Gold Medals when they compete, build their territory, explore, and find Easter eggs. Blue Ribbons are used to obtain building materials for provinces, while Gold Medals unlock virtual goods for avatars [20].

II. RESEARCH METHOD

Qualitative research, a widely used research approach in social science fields, was used to explore the experience factors in the Nikeland metaverse application. In addition to being suitable for metaverse experiences, qualitative research method was used within the scope of the study due to its advantages such as comprehensive analysis, inductive analysis, qualitative data use, individual contact and in-depth understanding, flexibility [21].

A. Sampling

The sample of the research consists of a total of 15 people, selected as non-probabilistic, who are in Turkey and have experienced the Nikeland game, which is the subject of this research. Purposeful sampling is a sampling method that is widely used in qualitative research [22], and it is used to identify and select situations enrich in knowledge or experience on the subject of research [23]. For those who want to participate in the research, being over the age of 18 and experiencing the Nikeland game were determined as the criteria for participating in the research. The method used to determine the sample size in qualitative research is saturation [24], and in this study, the number of interviews was limited to 15 participants as the findings began to repeat itself after 15 participants. All participants have experienced the Nikeland game. While 6 of the participants are women, 9 are men. Participants are between the ages of 18-30 (Average: 23). While 12 of the participants had heard of the concept of Metaverse before, 3 of them stated that they did not know about the metaverse. While 53% of the participants stated that they play games frequently, 47% stated that they do not play games frequently. The different characteristics and different experiences of the participants contributed to obtaining quality data in the study. The characteristics of the participants are shown in Table 1. It was coded as P (participant) to protect the identities of the participants.

TABLE I. CHARACTERISTICS OF THE PARTICIPANTS

Participant	Gender	Age	Profession	Q1 ^a	Q2 ^b
P1	M	30	Pruchasing Specialist	Yes	Not Often
P2	M	23	Basketball Youth Team Specialist	Yes	Often
P3	M	27	Media Specialist	Yes	Not Often
P4	M	28	Software Developer	Yes	Often
P5	F	20	Medical Technician	No	Not Often
P6	F	18	Student	No	Often
P7	F	18	Student	Yes	Often
P8	M	18	Student	Yes	Often
P9	F	19	Student	No	Not Often
P10	M	25	Media Specialist	Yes	Not Often
P11	M	20	Software Developer	Yes	Often
P12	M	29	Education Consultant	Yes	Often
P13	F	24	Nutritionist	Yes	Often
P14	F	23	Student	Yes	Not Often
P15	M	18	Student	Yes	Not Often

^aHave you heard of Metaverse before?
^bHow often do you play games?

B. Procedure

In this study, semi-structured interview technique was used as data collection method and an interview form based on user reporting was used. Semi-structured interviews were collected between May and June 2022. Interviews conducted within the scope of qualitative research try to understand the world from the perspective of the subject, reveal the meaning of their experiences, and reveal their lived world before scientific explanations [25]. The present study was conducted within the scope of ethical approval given by Eskişehir Technical University, Social and Human Sciences Ethics Committee. Before starting the interview, the consent form was read, stating that the participants voluntarily participated and gave their consent. While creating the semi-structured interview form, questions developed by Aydoğdu [16] were used. Interviews were held as conversation with the participants about their experiences. Within the scope of the interviews, “Have you heard of the concept of metaverse, what do you think about it?”, “How do you hear the concepts of metaverse and sports together?”, “Can you tell us about your sensory experiences during this game you are playing?”, “How would you evaluate the interaction during your experience? ”, “Can you give information about the emotions you experience during the game?”, “Can you give information about the effect of the game on your mood?”, “How did you feel about the flow of time while playing the game?”, “How do you establish a relationship between the real place you are in and the place in the game? ? and how would you evaluate your experience with the game holistically?” and “How do you feel about the Nike brand?” questions were asked and drilling interview questions related to each question were also used. Game play and call times range from 23 to 73 (Average: 40) minutes. With the consent of the participants, a voice recorder and/or zoom recording was used.

C. Data analysis

Audio recordings and video recordings of the conducted interviews were transcribed after watching and listening, and then analyzed within the framework of Braun and Clarke's [26], thematic analysis approach. Based on the data obtained from the transcriptions and interviews, the codes and themes were determined by analyzing the two researchers in the study. To ensure the consistency and cross-check of the information provided by the experienced participants, double checks were made between different data sets [22]. In order to ensure reliability in qualitative research, the criteria pointed out by Lincoln & Guba [27], were used. In this context, data, investigator and method triangulation methods were used, the results were subjected to the member check procedure, and not only behaviors and experiences but also contexts were tried to be described in order to provide a deep and intense explanation.

D. Validity and reliability

In qualitative research, validity and reliability are two basic concepts that give meaning to the findings and reporting of the research. The phenomenon of validity is an important issue that should be emphasized in qualitative research, especially in which interview and observation techniques are used. In this study, Maxwell (2005) is based on the strategies he focuses on regarding validity in qualitative research.



Demir et al.

Lincoln and Denzin (2003) reveal that membercheck can be used as the most important technique to ensure trustworthiness in some qualitative research. Similarly, Porter (2007) underlines that trustworthiness can be supported in qualitative research by using the participant confirmation procedure. In order to ensure the credibility of the research findings, method diversification/triangulation pointing to different data sources, member control was provided through four interviewed participants. Theme names and numbers obtained through the meetings were subjected to inter-coder reliability, and the rate obtained was above the recommended rate (> 0.80).

III. FINDINGS AND RESULTS

As a result of the analysis of the interviews, the participants' experiences of the game Nikeland in Metaverse were gathered under 7 themes. These themes are; perception of reality, chaotic structure in access, flow, age beyond sports, atmospheric, feelings, innovative brand. Figure 5 shows the themes and sub-themes of the metaverse Nikeland gaming experience. Information on each theme and the sub-themes of these themes is explained below.

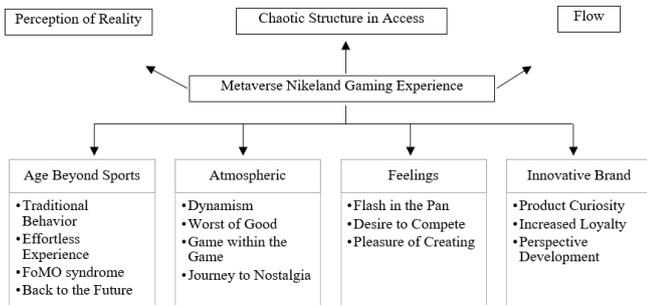


Fig. 5. Metaverse Nikeland Gaming Experience

A. The Age Beyond Sports

The Age Beyond Sports refers to an era in which sports and sports brands exist in the metaverse universe. The sub-themes that make up this theme are "traditional behavior", "effortless experience", "FoMO syndrome" and "back to the future". These sub-themes represent the the age beyond sports. Some of the participants have a traditionalist idea about the existence of sports in the metaverse universe. These participants do not think that sports can be experienced in the metaverse universe. They stated that the coming of the age beyond sports will not cause a change in their behavior and they are willing to live this era in our own universe. In addition to these participants, some participants find it reasonable to experience sports events from where they are, as this the age beyond sports in the metaverse universe offers sports consumers an effortless experience. FoMO, short for Fear of Missing Out, states that sports businesses take their place in the Metaverse in order not to fall behind their competitors and other industries. According to some of the participants, Nike's involvement with a game in the metaverse universe is one of the steps taken to keep up with the agenda and to catch the new. Argan [28], revealed that consumers in the metaverse universe are busy with the feeling of FoMO, that consumers experience this feeling in order not to be left behind from their friends, and therefore they exist in the metaverse. In this study, it was mentioned that sports businesses rather than consumers in the metaverse universe experience FoMO syndrome.

Finally, some of the participants stated that the age of beyond sport is the era of the near future and that this era is currently in its infancy. They stated that we will see this age, which we saw the beginning of, much more frequently and in different ways in the future. Participant views supporting this theme are given below:

“I wouldn't attend a basketball game in the metaverse universe, the appearance of the players wouldn't taste the same” (P8).

“Going to the stadium and watching the match is more enjoyable than going to the stadium in the metaverse and watching the match” (P1).

“Instead of going abroad and getting tired, I would like to join them in the metaverse, it will be in the future”(P14).

“There was a champions league last week, I wanted to go to Paris a lot, but I didn't have the time and money, I wish there was such a technology that I could feel myself there” (P12).

“Sports clubs don't want to lag behind their competitors, they want to catch the market using metaverse, I don't think this game will develop further. It's just a game that Nike made so that they could step into the Metaverse. Even though I don't like the game much, the game is not Nike's business anyway, they wanted to be a brand in this environment, and they left such an impression on me” (P1).

“We can meet with people from several different countries and organize events. The future looks bright. The metaverse and sports will definitely be intertwined, and sports will be spread to the public” (P12).

“I don't think it will be popular in the next 10 years, maybe will popular in the world of the 2050s” (P2).

“Sports games are currently in their infancy in the metaverse. It's like a preview, like a starter version”(P3)

“The future is going this way. World giants are making their names like this, probably the future will be here, but it's not like what I see now, I think it may look more real”(P2).

“According to the statements made, metaverse will come closer us more in the near future” (P3)

B. Atmospheric

This theme was chosen to describe the atmosphere that users observe in Nikeland game. Sub-themes such as "dynamism", "worst of good", "game within the game" and "journey to nostalgia" are used to describe the physical characteristics of the game. Some of the participants described the Nikeland game as an utopia with lively and vibrant colors. This game made by Nike was interpreted by some participants as a bad work of a good brand that could not be attributed to the Nike brand. The high position of the Nike brand in perceptions has increased the expectation for the game. The comments of the participants, who emphasized the sports games in the Nikeland game, were discussed in the sub-theme of the game within the game. Some of the participants stated that they went back to the beginning of the game age after experiencing this game and remembered their past experiences. Participants in the research on this theme made the following comments:

“The atmosphere was beautiful, it draws people in, it is colorful, it draws people to play” (P8).

“The colors were vivid and pleasant, the environment was beautiful, there were surreal things, it was like in a dream, there were beautiful things”(P4)

“The design and sound are beautiful, the graphics and clothes are interesting” (P9).

“When I say Nike, I expect the highest quality work, so the game's graphics and control are a disappointment. Nike upset me with this attempt”(P12).

“I liked the little games within the game” (P13).

“I had a lot of fun because I like things with flying and jumping, I played basketball, tried the balance bar, played tennis” (P7).

“I enjoyed it, it was like the games I played when I was little, like Atari and Play Station. It took me to the past, I felt it in my childhood. I said what happened now, there are some very realistic games”(P12).

“It looks like the 70s and 80s when the gaming culture of Amiga was just beginning. It's like we're back in another place, in another world. It's like we're starting over from another technology”(P2).

C. Feelings

This theme is a preferred concept to describe the emotions and feelings experienced by users during the game. Some of the participants who experienced the Nikeland game stated that after starting the game with great interest and curiosity, this interest faded quickly. This feeling of the participants was interpreted with the sub-theme of "Flash in the Pan". Some of the participants stated that they enjoyed competing with other players on the sports tracks included in the game. This feeling was discussed with the sub-theme "Desire to Compete". The last of the sub-themes is the "Pleasure of Creating" theme. Some of the participants stated that they enjoyed designing areas such as the basketball court in the game themselves. The participant opinions describing their feelings and emotions after the game experience are as follows:

“After a certain time, things to do end up, you can only customize your character, it just gets boring” (P8)

“I was curious at first when Nike got into a business like this. When I say Nike, I was disappointed with the graphics and control of the game as I expected the highest quality work. But when I got used to the game, I got excited and my sense of competition and struggle emerged” (P12).

“I was curious about the game first because I found the design and graphics nice. I think that it does not give the excitement that a game can give, it does not make one want to continue” (P9).

“What I could not do in the world, I could do in the metaverse. I bought a freer world, a field, and did things that I could not do in the normal world” (P7).

“I was trying to get more points by competing with others, it was good, I liked designing the basketball court in my own way” (P11).

“Creativity, unlimited imagination, being able to do whatever you want, endless ideas. There is a construction section. It was a pleasure to be able to do what you want and what you have in mind on the playground. The game puts you in a sports competition with other people, if you want, you can be in the sports areas built by other people, if you want, you can build these areas yourself” (P15).

D. Chaotic Structure in Access

Chaotic structure in access is a concept that expresses the confusion and difficulty in accessing the Nikeland game. Sub-themes belonging to this theme were not used. More than half of the participants had difficulty in understanding the game menu, the directions in the game, the map and the purpose of the game. Opinions supporting the theme of chaotic structure in access are given below:

“The menu in the game was complicated at first, I couldn't quite understand the menu, but I learned it by playing around. For someone who hasn't played before, this is a lack. Since I've played before more games, I have caught things from there. It seemed a little chaotic to me, why do I go to the store and collect the points? Normally in the other games, simple tasks are given in the first place and you learn the game while doing these tasks, you know what to do next time, there was no such thing in this game” (P1)

“I entered the menu, the task was given, but I did not understand what to do. I had to repeat the same page over and over. I had a hard time and in-game information was insufficient in my opinion.” (P5).

“I couldn't understand the game at first. There should be a notification box when you enter the game. I started directly in the game and I did not understand, then I started to understand” (P6).

“I think the menu is not enough, I questioned what my purpose is and what I need to do” (P10).

“The information was missing and I couldn't get the information I wanted, it can be improved. Commands can be shown when we first enter the game. It can be an area that shows how the stages work and how we can score” (P11).

E. Flow

The flow theme was used to explain the intention of the participants who experienced the game to continue their activities and their willingness to repeat their actions. Flow theory was introduced by Csikszentmihalyi [29]. According to this theory, consumers experience positive emotions with a mood that will forget themselves and time in the virtual environment. If there is a shift in the concept of time and more concentration, it means that the flow has taken place. Flow experience is defined as a desired behavior for games [30]. Some of the users who experienced the Nikeland game commented on the flow:

“Time passed so fast, I played the game for 1 hour, which I thought I played for half an hour” (P2).

“I've been playing for half an hour, I'm just at the basketball place, I didn't think it's been so long. You are trying to complete the goal given to you regardless of time” (P7).

Demir et al.

“We're going back to Einstein's theory of relativity, right? Time passes quickly, the game encompasses users regardless of age” (P12).

“Usually when you're playing games, you don't realize how time flies. While you are trying to complete the track in the game, you do not understand how the time passes when you buy products in the store. In this game, I can say that although I didn't get too caught up in the concept of time flow, I got a little carried away” (P1).

F. Perception of Reality

The perception of reality can be defined as the perception of the virtual environment as the real environment by breaking away from the reality. The theme of perception of reality is about whether the participants are disconnected from the real environment in their game experiences. Most of the participants stated that this game was not close to reality and there was no change in their perception of reality. Argan [26], revealed that students who experienced concerts, parks and events in the metaverse had a change in their perception of reality as a result of this experience. However, as a result of the Nikeland game experience, most of the participants in this study did not experience the perception of mistaking the virtual environment as a real environment. The comments of the participants are given below:

“My perception of reality has not changed, there is no such advanced technology there. There may be a change in my perception of reality in the future. If good projects develop in the future, they can be much more fun and interesting” (P4).

“My perception of reality has not changed. If the game is developed, made more difficult and more complex, it could get better, it felt good.” (P9).

“If it is developed, I may not want to leave this universe, that's the scary part.” (P7).

“There was no change in my perception of reality. The future goes this way. Popular companies start to use metaverse terms in their brands. The future will probably be here, but not as I see it now, I think it might seem more realistic. What we see now looks like a baby in the womb” (P2).

G. Innovative Brand

The final theme of the Nikeland game experience was chosen for the participants to express their views on the Nike brand. More than half of the participants evaluated the brand's initiative as innovative, whether they liked the game or not. Some of the participants wondered if the Nike products they saw during the game were actually real. The sub-theme “product curiosity” was used to express this. It was stated by some participants that this initiative of the brand in the metaverse also increased loyalty to the brand. The “increased loyalty” sub-theme was used to describe these participants. The sub-theme “perspective development” is a preferred concept to express the expansion of sports knowledge in users thanks to this initiative of Nike. As users have this experience, they can have the opportunity to get to know and learn about sports branches and the fields of sports branches. The opinions of the participants within the scope of this theme and sub-theme are given below:

“I find it wise. Every startup has to advertise everywhere. I have to admit, this game tickles my consciousness of purchasing Nike products. After the game, I looked at a shoe” (P2).

“I saw a shoe model that I did not know before, I wondered what it really was. When I saw the products that I did not know, I was curious. It's a cute thing Nike did. I think it's a good advertisement.” (P5).

“I like that Nike is doing advertising work in a technology-oriented space. I saw Nike's products that I did not know. Nike's memorability has increased, I think it's good that it is involved in such a business. It doesn't exactly reflect reality, but I was still curious. T-shirt, shoes that I liked in the game, I would like to go and see these products.” (P4).

“They made very good products. Shoes, bags and clothes were very visible, I liked them. I didn't know there was such a game, I liked that they did it, I think it was good that they made progress not only in clothing but also in technology. If there is a product in the game that interests me, I open it to see if it really exists, and it arouses curiosity. I bought shoes and bags in the game.” (P9).

“I like that Nike brings sports to the game. As far as I can see, there was athletics, basketball and tennis. I like it, at least people will be informed while playing games, there are many people who do not know these sports branches. They can even see what the athletics field is like here. Doing such a thing will make a positive contribution to the promotion of sports.” (P14).

IV. CONCLUSION AND DISCUSSION

Seven themes and sub-themes were obtained as a result of this study, in which we revealed how the users who experienced the Nikeland game, which is the initiative of the Nike sports brand in the metaverse, perceive the metaverse and this sports game. These themes are; the age beyond sports, atmospheric, feelings, chaotic structure in access, flow, perception of reality and innovative brand. The findings revealed in the study show parallelism with some findings in the field [15], [28], [29]. The themes and sub-themes obtained in the study were put forward in an original way regarding the concepts of metaverse and sports. Dimensions such as ; the age beyond sports, FoMO syndrome, flash in the pan, worst of good, and the pleasure of creating are original terminologies that are thought to contribute to the literature.

Research with metaverse and its effect is gaining attention. Kissenger et. al. (2021) stated differentiating between human and nonhuman impact can be helpful for the real understanding of the duality of power in today's digital space. The latter power, AI, will be expanding at the cost of human impact. It is worrying that AI is put next to climate change as one of the most important challenges for humanity. Bojic (2022) also suggest, a meta world or any other universe can be both helpful or causes damage for humanity.

While a case study Hollensen et al. [4] about the Nikeland game has been reached in the literature, no experiential study has been found. Especially in the literature, there is no study focusing on the perspectives of individuals who experience

gaming in the metaverse. In this respect, this research shows the quality of closing the gap in the literature.

As a result, this study investigated the experiences of users playing Nikeland, an initiative of the Nike brand in the metaverse field. In essence, this study is thought to contribute to the user-oriented development of the Nikeland game, which is evaluated by users. For example, when we consider the "flash in the pan" sub-theme, new strategies can be applied to the game in question and regulations or improvements can be made that can increase the immersion of the game. When we examine the theme of chaotic structure in access, it can be ensured that users can leave more satisfied with their experience with user-oriented updates to the interface in the game. In addition, it offers brands that aim for a new venture in the metaverse in the field of sports to make their user experiences more perfect in their projects. For example, in the study conducted, it was positively received by the participants that the Nike brand kept up with the times and offered a game experience to the users in the metaverse.

On the other hand, it is seen day by day that the metaverse has a rapidly growing market value. According to some studies such as ReportLink's [31], the Metaverse Marketplace is projected to be worth \$758.6 billion in 2026. When we look at it from this point of view, it is also thought that many brands or companies want to gain income from the said market share by making ventures in the metaverse. Although the study focused on the game experience of the users, it is thought that it can contribute to other types of experience in the metaverse area.

V. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE STUDY

Limitations of the Research

This study was conducted with a limited number of participants due to the nature of qualitative studies. It was assumed that the participants were sincere in their views and answers, and the research was shaped by considering that the views of participants reflect reality.

Another important limitation of the research is that the game was not experienced with VR or AR glasses. The experiences of the participants can be shaped in different ways by using these materials.

Suggestions for Future Studies

This research was discussed as a qualitative study. In the future, the research method can be diversified by using the quantitative method for this research.

This study can also be done by considering different types of experience in the metaverse universe.

This study can be repeated a few years later and it can be argued whether the Nikeland game has kept up with the times.

New inferences can be made by comparing different types of games and Nikeland game in Metaverse.

Considering the opinions and comments obtained from this study, new sports games can be included in the metaverse universe.

A comparison between the game of Vans, another sports brand featured in Roblox, and the game of Nikeland. SWOT analysis between these two games.

REFERENCES

- [1] Jeon, J. E. (2021). The Effects of User Experience-Based Design Innovativeness on User-Metaverse Platform Channel Relationships in South Korea. *Journal of Distribution Science*, 19(11), 81-90.
- [2] Alcañiz, M., Bigné, E., & Guixeres, J. (2019). Virtual reality in marketing: a framework, review, and research agenda. *Frontiers in psychology*, 10 (1530).
- [3] Damar, M. (2021). Metaverse Shape of Your Life for Future: A bibliometric snapshot. *Journal of Metaverse*, 1(1), 1-8.
- [4] Hollensen, S., Kotler, P., & Opresnik, M. O. (2022). Metaverse—the new marketing universe. *Journal of Business Strategy*.
- [5] Dionisio, J. D. N., Burns III, W. G., & Gilbert, R. (2013). 3D virtual Worlds and the metaverse: Current status and future possibilities. *ACM Computing Surveys*, 45(3), 1-38.
- [6] Kim, J. (2021). Advertising in the Metaverse: Research Agenda. *Journal of Interactive Advertising*, 21(3), 141-144.
- [7] Çelik, R. (2022). Metaverse Nedir? Kavramsal Değerlendirme ve Genel Bakış. *Balkan ve Yakın Doğu Sosyal Bilimler Dergisi*, 08 (01), 67-74.
- [8] Çelikkol, Ş. (2022). Metaverse Dünyası'nın, Tüketici Satın Alma Davranışları Açısından Değerlendirilmesi. *İstanbul Kent Üniversitesi İnsan ve Toplum Bilimleri Dergisi*, 3(1), 64-75.
- [9] Han, D. I. D., Bergs, Y., & Moorhouse, N. (2022). Virtual reality consumer experience escapes: preparing for the metaverse. *Virtual Reality*, 1-16.
- [10] Yee, N. (2006). The demographics, motivations, and derived experiences of users of massively multi-user online graphical environments. *Presence: Teleoperators and virtual environments*, 15(3), 309-329.
- [11] Saren, M., Harwood, T., Ward, J., & Venkatesh, A. (2013). Marketing beyond the frontier? Researching the new marketing landscape of virtual worlds. *Journal of Marketing Management*, 29(13-14), 1435-1442.
- [12] Newzoo.com "Newzoo: Introduction to the Metaverse Report," 2021. [Online]. Available: <https://newzoo.com/insights/trend-reports/newzoo-intro-to-the-metaverse-report-2021-free-version/> [Accessed: 08.04.2022]
- [13] Kottke, M. "Metaverse: New opportunities for sports marketing," 2021. [Online]. Available: <https://beyond-the-match.com/en/insights/metaverse-new-opportunities-for-sports-marketing/> [Accessed: 11.04.2022]
- [14] Chiang, Y. T., Lin, S. S., Cheng, C. Y., & Liu, E. Z. F. (2011). Exploring Online Game Players' Flow Experiences and Positive Affect. *Turkish Online Journal of Educational Technology-TOJET*, 10(1), 106-114.
- [15] Luo, M. M., Chen, J. S., Ching, R. K., & Liu, C. C. (2011). An examination of the effects of virtual experiential marketing on online customer intentions and loyalty. *The Service Industries Journal*, 31(13), 2163-2191.
- [16] Aydoğdu, V. (2021). Sanal Deneyim Etkinliği ve Dijital Pazarlama Kapsamında Konsol Oyunlarının Tüketicilerin Satın Alma Niyeti Üzerine Etkisinin İncelenmesi. *Doktora Tezi. Eskişehir: Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü.*
- [17] Park, S., & Kim, S. (2022). Identifying World Types to Deliver Gameful Experiences for Sustainable Learning in the Metaverse. *Sustainability*, 14(3), 1361.
- [18] Wiederhold, B. K. (2022). Metaverse Games: Game Changer for Healthcare?. *Cyberpsychology, Behavior, and Social Networking*, 25(5), 267-269.

Demir et al.

- [19] Hirsh-Pasek, K., Zosh, J. M., Hadani, H. S., Golinkoff, R. M., Clark, K., Donohue, C., & Wartella, E. (2022). A whole new world: Education meets the metaverse. *Policy*.
- [20] Nike.com. "A Virtual World On Roblox For Fans To Play Online Mini-games" 2021. [Online]. Available: <https://news.nike.com/news/five-things-to-know-roblox> [Accessed: 25.04.2022]
- [21] Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business Research Methods* (Vol. 9, pp. 1-744). New York: Mcgraw-hill.
- [22] Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Thousand Oaks, CA: Sage publications.
- [23] Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, 42(5), 533-544.
- [24] Bryman, A. (2016). *Social research methods*. Oxford university press.
- [25] Kvale, S., & Brinkmann, S. (2008). *Interviews: Learning the craft of qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- [26] Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- [27] Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. California: Sage Publications.
- [28] Argan, M., Argan, M. T., & Dinç, H. (2022). Beni Başka Âlemlere Götür! Kullanıcı Temelli Metaverse Etkinlik Deneyimi. *Journal of Internet Applications and Management*, 13(1), 33-53.
- [29] Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience* (Vol. 1990). New York: Harper & Row.
- [30] Liu, C. C. (2017). A model for exploring players' flow experience in online games. *Information Technology & People*, 30(1), 139-162.
- [31] Floridi, L. (2022). Metaverse: a matter of eXperience. *Philosophy & Technology* September 2022.
- [32] Maxwell, J.A. (2005). *Qualitative Research Design. An Interactive Approach*. Second Edition, Sage Publication Inc., California, pp. 109-114.
- [33] Porter, S. (2007). Validity, trustworthiness and rigour: reasserting realism in qualitative research. *Journal of Advanced Nursing*, 60(1), 79-86.
- [34] Lincoln, Y.S., Denzin, N.K. (Eds.). (2003). *Turning points in qualitative research: Tying knots in a handkerchief* (Vol. 2). Rowman Altamira.
- [35] Pritchard C (2022) Top 10 companies investing in the metaverse. <https://www.parcl.co/blog/top-10-companies-investing-in-the-metaverse>. Accessed 31 July 2022
- [36] Binance (2021) What is the metaverse? <https://academy.binance.com/en/articles/what-is-the-metaverse>. Accessed 5 Feb 2022
- [37] Stephenson N (1992) Snow crash. Bantam Books, New York <http://www.randomhousebooks.com/books/172832/>
- [38] Johnson J (2021) Worldwide digital population as of January 2021. <https://www.statista.com/statistics/617136/digital-population-worldwide/>. Accessed 1 Feb 2022
- [39] Bojic, L. (2022). Metaverse through the prism of power and addiction: what will happen when the virtual world becomes more attractive than reality?. *European Journal of Futures Research*, 10(1), 1-24.
- [40] Kissinger HA, Schmidt E, Huttenlocher D (2021) *The age of AI: and our human future*. Little, Brown and Company, New York <https://ageofaibook.com/>

