

The Entry of Sports Brands into the Metaverse

Spor Markalarının Metaverse Girişi

Engin VURAL¹ 

¹Muş Alparslan University, Ph.D. Student in Physical Education and Sports, Muş, Türkiye.

Abstract

This study aims to examine the entry of sports brands into the metaverse, one of the innovations brought by the modern world. The qualitative research model was used in the study, which is characterized by the blending and interpretation of photographs, records, and documents from researchers' surroundings. Additionally, the document analysis technique was used to collect and analyze the data in detail. Sports brands Nike and Adidas created new platforms in the metaverse, filed patent applications on various issues such as buying and selling Non-fungible token (NFT), and established partnerships with various companies. Nike established a metaverse virtual platform called Nikeland, which bears its name. With Nikeland, users create avatars and play games in various sports branches. Nike sells its eponymous clothing NFTs, allowing users to dress their avatars and integrate physical movements made offline into the online platform created in the metaverse. At the same time, it is observed that users are enabled to create private spaces with the tasks developed on the Nikeland platform and users are incentivized by rewarding them for the tasks performed. Adidas, on the other hand, placed its NFTs on sale under the name Adidas Originals and it was determined that it allowed users to dress their avatars in the Sandbox metaverse and to have discounts on Adidas products offered for sale in the real world. As a result, it is observed that globalized sports brands such as Nike and Adidas have taken steps to use the metaverse technology brought by the modern world. The purpose of sports brands to enter the metaverse is to increase competition by reaching users and to encourage users to sports. In addition, brands aim to create a system where both they and the users win by selling NFTs bearing their names to users. Accordingly, it is thought that the activities of big brands such as Nike and Adidas can set an example for other brands.

Keywords: Metaverse, Non-fungible token, Sports brands

Öz

Bu çalışmanın amacı, spor markalarının modern dünyanın getirdiği yeniliklerden olan Metaverse evrenine girişlerinin incelenmesidir. Çalışmada araştırmacının çevresindeki fotoğrafları, kayıtları ve dokümanları harmanlayarak yorumlaması ile öne çıkan nitel araştırma modeli kullanılmıştır. Verilerin ayrıntılı olarak toplanması ve analiz edilmesi için doküman analizi tekniği kullanılmıştır. Spor markalarından Nike ve Adidas; metaverse evreninde yeni platformlar oluşturdukları, Non-fungible token (NFT) alım ve satımı gibi çeşitli konularda patent başvuruları yaptıkları ve aynı zamanda her iki markanın da çeşitli şirketlerle ortaklıklar kurdukları saptanmıştır. Nike, kendi adını taşıyan Nikeland isimli bir metaverse sanal platformu kurmuştur. Nikeland ile kullanıcılar avatarlarını oluşturarak çeşitli spor branşlarında oyunlar oynamaktadır. Nike, kendi adını taşıyan kıyafet NFT'leri satarak kullanıcıların oluşturdukları avatarları giydirebilmelerine ve çevrim dışı yapılan fiziki hareketlerin metaverse evreninde oluşturulan çevrim içi platforma entegre edilmesine olanak sağlamaktadır. Aynı zamanda Nikeland platformunda geliştirilen görevlerle kullanıcıların özel alanlar oluşturmalarına olanak sağlanmakta ve gerçekleştirilen görevler karşılığında ödüllendirmeler yapılarak kullanıcıların teşvik edildiği görülmektedir. Adidas ise Adidas Originals adıyla NFT'lerini satışa çıkarmış olup hem kullanıcıların Sandbox metaverse evreninde kendi avatarlarını giydirebilmelerine hem de gerçek dünyada satışa sunulan Adidas ürünlerinde indirimlere sahip olmalarına olanak sağladığı saptanmıştır. Sonuç olarak Nike ve Adidas gibi globalleşmiş spor markalarının modern dünyanın getirdiği metaverse teknolojisinin kullanımı noktasında adımlar attıkları görülmektedir. Spor markalarının metaverse giriş amaçları kullanıcılara ulaşarak rekabeti artırmak ve kullanıcıları spora teşvik etmektir. Ayrıca, markalar kendi isimlerini taşıyan NFT'leri kullanıcılara satarak hem kendilerinin hem de kullanıcıların kazandıkları bir sistem oluşturmayı hedeflemektedirler. Nike ve Adidas gibi büyük markaların bu faaliyetlerinin diğer markalara da örnek oluşturabileceği düşünülmektedir.

Anahtar Kelimeler: Metaverse, Non-fungible token, Spor markalar.

Not: Bu araştırma I. Uluslararası Sosyal Bilimler Kongresi. Bitlis Eren Üniversitesi. Sosyal Bilimler Enstitüsü'nde özet bildiri olarak sunulmuştur (Haziran, 2022).

Journal of Sports and Science 2(2): 43-59

e-ISSN: 2980-2067

Sorumlu yazar: Engin VURAL,

0000-0002-7717-4928

enginvural06@gmail.com

Künye: Vural, E. (2024). *The Entry of Sports Brands into the Metaverse. Journal of Sports and Science*, 2(2), 43-59.

Tarihler:

Geliş: 13.07.2024

Kabul: 13.08.2024

Yayın: 23.10.2024

INTRODUCTION

The concept that applies to every living thing in the universe is change. Even if everything that changes is thought to be an end, change is a beginning. To give an example, internet is the most appropriate for this situation and it is a concept that confronts people with innovations every day in terms of change. It is observed that the internet, whose original purpose was military communication, has evolved into a real modern-age revolution as a result of the change and transformation it has undergone over time (Özkahveci et al., 2022). The internet, whose purpose of use has expanded, was opened to commerce towards the end of the 90s and brought new conveniences to our lives by being used in social platforms, e-commerce, smartphones, and mobile applications. It has also provided convenience to physically difficult situations. With these developments and changes, the internet has brought developments in terms of the concepts related to it. In terms of the development of the Internet, the concept of the web has facilitated our lives with every innovation it has brought and has become the center of human life. With the development of the Internet, Web 3.0, Blockchain, Industry 5.0, the Internet of Things, and artificial intelligence have entered our lives. Recently, a new concept "metaverse" has emerged among the innovations brought to our lives by the Internet, combined with Augmented Reality (AR). Although the word metaverse means fictional universe, it also means beyond the universe. With the concept of metaverse, people's perspectives on life have changed and some innovations that are hard to believe but at the same time real have started to be implemented. Metaverse has a great potential with its projects and innovations. (Özkahveci et al., 2022).

The limitation of the research is that Nike and Adidas brands were analysed. Within this scope, it is observed that huge sports brands such as Nike and Adidas, whose names are written in gold letters among sports brands, realized this potential and have taken their place in the metaverse. In this context, the current study aims to provide information to the reader by including the innovations introduced by Nike and Adidas in the metaverse and the opportunities offered by the brands to their users. The study is limited to the investigation of initiatives and innovations by Nike and Adidas brands.

Virtual Reality

Virtual reality offers the desired environments to users through technological tools and equipment. Virtual reality is defined as a system that can make users feel all human emotions in the most appropriate way, provides users the opportunity to control in 3D environments, and brings artificial intelligence and reality very close to each other, giving users the feeling of real

life in the virtual world (Kalkan, 2020). With its widespread use, virtual reality technology has started to be used in education, military studies, construction, and gaming sectors. Essentially, virtual reality aims to simulate real-world environments in the virtual world through the senses of individuals (auditory, visual, and tactile senses, etc.). Virtual reality technology fully utilizes modern multimedia, pattern recognition, computer graphics, sensors, and all other technological tools (Sivunen & Nordbäck, 2015).

Augmented Reality

Digital environments have caused radical changes in people's lives since the early 80s and brought innovations with them. Within this scope, it is observed that the traces of the digital age have been increasing from the past to the present. This concept, the digital age, has been in people's ears since the 1980s. The digital era has brought new forms and methods of perception to all existing and evolving forms of perception (Coşkun, 2017).

Among the innovations offered by this digital era, the concept of augmented reality has started to show itself day by day and has attracted the attention of many users. Augmented reality is the integration of real objects into virtual environments. Moreover, with the combination of virtuality and reality, augmented reality can be defined as presenting all the objects in the real environment to the user in the virtual environment and as a result of the reflection of the same senses, the user can see, hear and feel everything he sees in a real life in a virtual environment with the help of equipment (Azuma, 1997). In other words, augmented reality is used to refer to all situations in which "real images are augmented to be observed and heard in virtual environments" by moving all objects in a real environment to a virtual environment through computer graphics (Milgram & Kishino, 1994). Augmented reality is the presentation of objects that people encounter in the real world with virtual complements to make them more attractive and more meaningful to help users improve their perception of reality in virtual environments (Zhu et al., 2004).

Mixed Reality

When we look at the dimensions of virtuality that define the path starting from real environments and leading to virtual environments, reality has been handled in many ways (Milgram & Kishino, 1994). The structure called mixed reality refers to all the structures defined as augmented reality and augmented virtuality, which are in between in the process that starts from real environments and ends in virtual environments (Jerald, 2015). The process from the beginning to the end of mixed reality is shown in the figure.

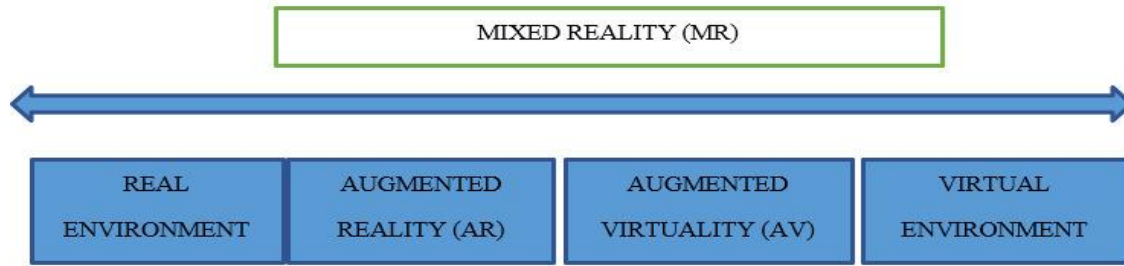


Figure 1. Simplified Representation of the Virtual Process (Milgram & Kishino, 1994)

As observed in Figure 1, virtuality increases as we move towards the right side of the figure, while reality increases as we move towards the left side of the figure. In this context, augmented reality is to integrate all virtual objects into the real world. Virtual reality is to bring all users together in a completely virtual environment. Mixed reality is to integrate virtual objects into the real world and show users virtual objects in the real world (Tokareva, 2018).

Definition and Characteristics of Metaverse

The concept of metaverse is a combination of two concepts. The concept of "metaverse" means beyond the universe. When it comes to the metaverse, the first thing that comes to mind are activities such as traveling, playing games, organizing meetings, and trading on virtual platforms. Although the metaverse is generally referred to as such, it is known as a big explosion of the digital age thanks to the great innovations it brings. The word metaverse was first used in 1992 in Neal Stephenson's book *Snow Crash*. There is no doubt that the Facebook Company changing its name to "META" had a great impact on the concept of the metaverse and becoming so popular (Kalkan, 2021). Another factor in the metaverse becoming so widespread and so popular is the great increase in digitalization during the COVID-19 process, which has undoubtedly made people extremely restless and tied them to their homes (Kang, 2021). Although the metaverse concept attracts attention by allowing users to engage in different activities in virtual environments, it is also observed that it protects users from discrimination such as gender, physical condition, race, and ancestry discrimination (Duan et al., 2021). The metaverse is all virtual platforms where people create their avatars in virtual environments to create a second persona and communicate with other users (Lee et al., 2021; Nevelsteen, 2018). The metaverse is a universe where real-world order is applied on virtual platforms. The metaverse offers a freer environment compared to the real world. However, there are also some rules in the metaverse. Users can communicate with other users in virtual environments by following these rules.

Moreover, users can go to concerts and visit art museums through their avatars in virtual environments just like in the real world. The metaverse allows users to watch sports competitions as if they were in the place where the sports competition takes place, and users can attend the concerts held in the metaverse with their avatars and enjoy the view and music as if they were in the concert area (Cannavo & Lamberti, 2021). For example, in South Korea, a KPOP music band performed their songs for the first time in an online game called Portlight and gave users the pleasure of music, in the same way, Blackpink, another music band, organized a signing ceremony and 50 million users participated (Cannavo & Lamberti, 2021).

In addition to everyday activities, metaverses include digital artworks called NFTs (Non-Fungible Tokens), which are still evolving. Furthermore, the metaverse includes activities such as buying, selling, exhibiting, and exchanging NFTs through cryptocurrencies.

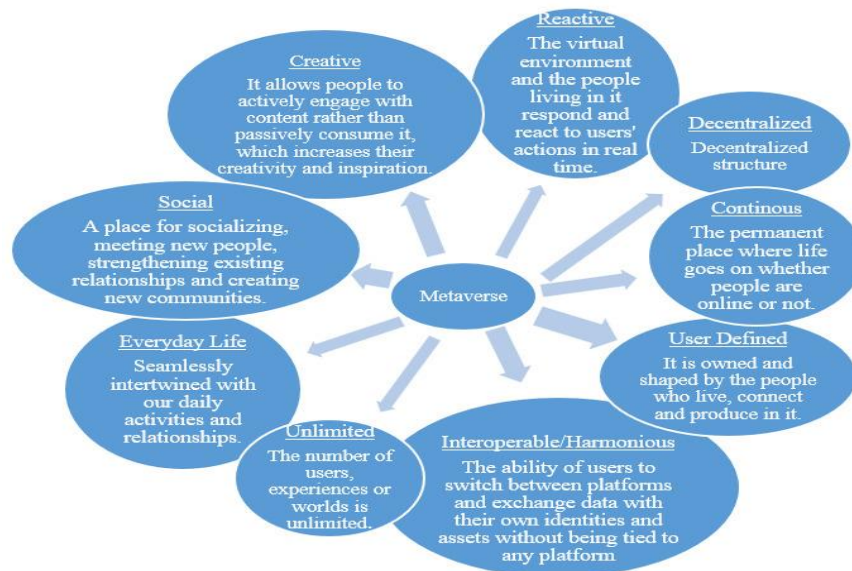


Figure 2. Key Elements of the Metaverse (Chiu, 2021)

In Figure 2, the basic elements of the metaverse are mentioned. Accordingly, the metaverse is observed to be a unique structure in that it is decentralized, has continuity, consists of creative environments, allows users to connect through defined avatars, and enables users to socialize with each other. Decentraland, The Sandbox, and Nikeland are the first concrete examples that come to mind when it comes to the metaverse. On metaverse platforms, users can visit art museums and art exhibitions with their avatars and sell the NFTs they created or buy other people's NFTs.

Furthermore, on platforms such as Decentraland and The Sandbox, users can earn coins, the digital currency of the platform, through their activities within the platform. For example, on the

Decentraland platform, users can join the platform as a guest and then connect to the hot wallet on the platform's blockchain network, which is independent of the system, and can easily make all other transactions. Moreover, on this platform, users can earn the platform's coin by playing games, and they can dress their avatars with this coin (Türk et al., 2022). On the Decentraland platform, users can also earn the platform's coins by traveling the platform with their avatars, listening to music, and doing activities while users can socialize with each other regardless of their nationality or language. Additionally, on the Decentraland platform, users can buy digital land or sell their digital land to someone else. Users can build any business on the digital lands they purchase or create their own homes. In this respect, it was observed that important steps were taken for humanity. Another platform, The Sandbox, is a metaverse platform with the same features.

Definition and Intended Use of NFT (Non-Fungible Token)

NFTs symbolize digital assets. NFTs, which form the very foundation of Web 3.0, are stored in the Blockchain. As cryptocurrency tokens, NFTs are one-of-a-kind certificates of ownership. NFTs cannot be exchanged in any way or traded for any asset, but can be bought and sold for cryptocurrency. NFTs are like many immuFigure digital assets, such as items in games, Twitter, Facebook, etc. As cryptographic tokens established on the Ethereum Blockchain, NFTs can have many digital appearances. In the current era, it is most commonly used as digital art. In this abstract world built on NFTs, more and more companies and brands enter these environments every day (Türk et al., 2022).

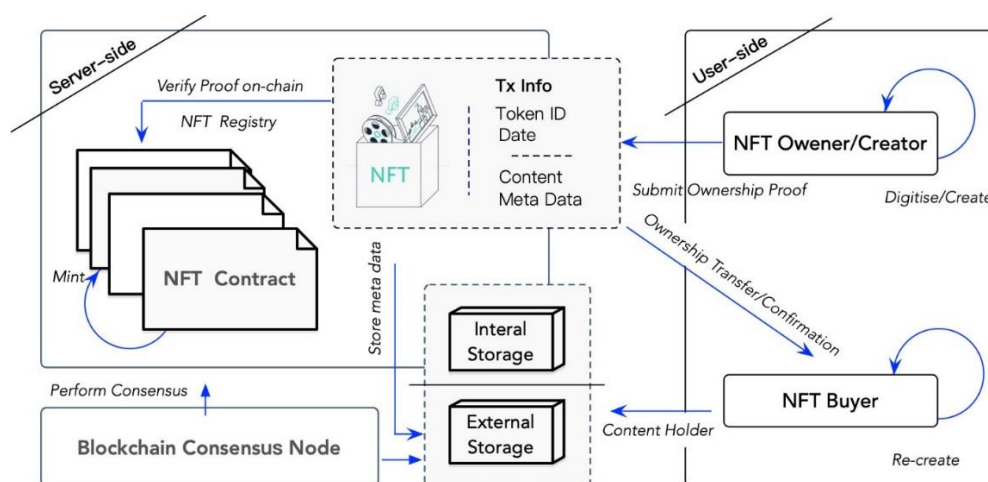


Figure 3. Functioning of NFTs (Wang et al., 2021)

As observed in Figure 3, the owner of NFTs first focuses on digitization. It then stores the data outside the blockchain. The NFT holder signs this transaction and then sends it to one of the

smart contracts. The NFT mint prints the transaction with the smart contract. The main mechanism behind NFTs is designed according to the logic of the token standards contained within. Once the transaction is confirmed, the minting process is complete. With this approach, NFTs are forever linked to a unique blockchain. In these circumstances, it is considered as a proof of permanence (Wang et al., 2021). In addition to the use of smart contracts for the sales of NFTs, it is also known that sales are made from sites on different networks such as Opensea, Magiceden.io, and Solanart.

Definition and Intended Use of Avatar

Avatars are virtual structures that users create to represent themselves by combining their characteristics to perform activities in games and virtual reality platforms. Only the users themselves can make changes to the avatars they create (Cotton & Oliver, 1997). A user can control his/her avatar, which is used to enter virtual environments, through virtual reality glasses or from a computer. Avatars are characters that represent people in virtual environments. In virtual environments, people can design their characters in the way they want to see them through the eyes of third parties. If they already have files such as voice filters on their characters, they can also make changes to their avatars (Jerald, 2015).

METHODS

Research Model

In this study, the qualitative model, one of the research methods, was used to examine the entry of sports brands into the metaverse. Qualitative research enables researchers to examine facts, documents, records, photographs, people, or institutions in depth depending on the subject of the study. Since qualitative research combines many concepts and different disciplines, it is difficult to use a single definition. Qualitative research can be observed as an umbrella concept. Qualitative research is a type of research that uses data collection methods such as document analysis, observation, and interview, and in which facts and events are observed naturally. In other words, it is an approach based on understanding the phenomena within the research based on investigating them in their natural environment and generating theories about the subject (Yıldırım & Şimşek, 2018).

Data Collection

Within the current study, the data were collected from national and international websites using the Google search engine, articles published in national and international journals, theses related to the subject by visiting the website of the National Thesis Center of the Council of Higher Education in Turkey and newspapers on the internet sites. At the same time, data were collected by utilizing forms, columns, and photographs used by companies that are related to the subject.

Data Analysis

In the document analysis technique, which is one of the qualitative methods, the researcher selects a sample for the subject he/she is researching, creates the categories, determines the analysis, and then analyzes the data he/she gathers and finds and presents it to the reader. Document analysis is the examination of all written, verbal, photographic, or visually created data on the subject in question. In the document analysis technique, the researcher first accesses the documents and then questions the authenticity of the documents. Then, he/she questions and analyzes the original data by comprehending the meaning of the documents whose authenticity he/she questions. Finally, it concludes by using the data (Yıldırım & Şimşek, 2018). Within this framework, the data collected from articles, theses, dissertations, columnists, and photographs used by companies through national and international websites using the Google search engine were collated and interpreted by the researcher and analyzed with the document analysis technique.

FINDINGS

Digital Outfits in the Metaverse: NFTs

As the metaverse has become extremely popular, both sports brands and other brands have filed patents for attempts to sell their products digitally. For example, in 2016, Bitmoji users decided to sell their digital designs by making a deal with Bergdorf Goodman, a luxury fashion icon, to dress their avatars in brands considered very luxurious such as Alexander McQueen and Zac Posen. In 2018, Carlings launched its first digital design, Neo-Ex, a collection of nineteen pieces that ranged from \$11 to \$33. The Fabricant, the first digital fashion house, was founded in 2019. Digital clothing, which offers digital photos and videos that are experienced in two dimensions, has moved to the third dimension with the advent of the metaverse, creating the feeling that users have digital clothes on them (Türk et al., 2022). To give another example, in 2021, a person who

went to a Gucci store turned on the camera of his cell phone and held it to his feet, displayed a digital shoe on the screen of his cell phone, and bought that shoe digitally for \$12.99. Gucci opened a digital store bearing its name and sells its products in the metaverse (Haber Global, 2021). In the metaverse, famous brands sell many products that cannot be physically touched and worn but can be worn by their avatars. Similarly, sports brands also exist in the metaverse. In meta videos, it is observed that brands such as Nike, Adidas, and Prada pioneered the creation of a clothing and footwear market for users to dress their avatars through NFTs. These brands produce and put on sale digital products that can never be physically touched or worn in the metaverse so that their users can dress their avatars (Türk et al., 2022).

Nike's Entry into the Metaverse

Nike's entry into the metaverse and its innovations in the metaverse are undeniable, having truly grown among sports brands and created a huge physical market for itself. Nike, which applied for a trademark to the US Patent and Trademark Office to be in these formations, has found a place in the metaverse. In this sense, Nike has embarked on different projects to produce computer programs such as downloadable virtual shoes, glasses, clothes, bags, and hats in the metaverse (Türk et al., 2022).



Figure 4. NFT Shoes in the Nike metaverse (Ulukan, 2021)

The Nike brand has announced the acquisition of RTFKT, a company that leverages the latest digital innovations to produce, launch, and sell digital products in the metaverse. RTFKT is known as a company that is fully engaged in the metaverse and NFTs and produces virtual shoes. With this move by Nike, it is observed that the company attaches importance to the metaverse world and NFTs. Founded in 2020, RTFKT utilizes Blockchain authentication, augmented

reality, and NFTs while producing digital products. In February, RTFKT sold 600 pairs of NFT virtual shoes paired with real sneakers in just six minutes, earning over \$3.1 million (Ulukan, 2021). Nike has already undertaken initiatives for virtual environments. In May 2019, the shooter game Fortnite partnered with Air Jordan, a sub-brand of Nike, to make characters wear sneakers with Nike logos.



Figure 5. Nike's Fortnite Deal – Air Jordan Shoes (Estnn, 2023)

Nike also took steps to create its metaverse and reached an agreement with Roblox, an online gaming platform. The metaverse produced as a result of the agreement is called Nikeland. Nikeland is designed as a virtual playground and is inspired by Nike's headquarters in the US. People can play many games in Nikeland, Nike's metaverse.

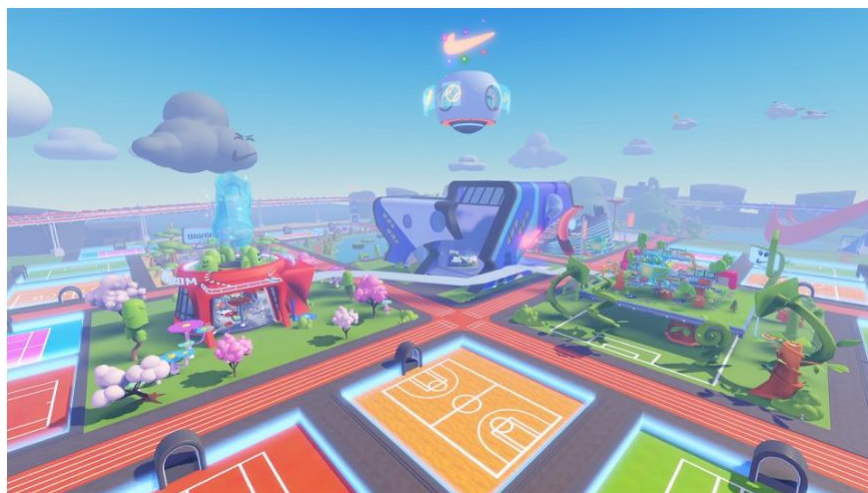


Figure 6. Nike's Metaverse – Nikeland (Roblox, 2023)

Another great feature of the Nikeland universe is the accelerometer sensors that allow people to integrate their real-life movements into the game. For example, users can move their devices in

real life to perform movements in the game, such as long jumps or fast runs. Thus, in-game movements are synchronized with real-life actions. Nikeland focuses on sports-oriented games in general.



Figure 7. Nikeland Games (Roblox, 2023)

Users can buy Nike products or NFTs that they like and want to dress up their avatars in the Nikeland universe through the Nike virtual store. Nike has increased its investments in the metaverse. In this sense, Nike stated that they aimed to move some of their global sporting events and competitions to Nikeland. It is observed that users can purchase Nike's Digital NFT products not only in Nikeland but also in different metaverse environments. In Nikeland, users can dress their avatars with products such as Air Force 1 and Nike Blazer.



Figure 8. Nike's Virtual Products (Roblox, 2023)

One of the reasons why Nike specifically chose Roblox for the metaverse is that it targets the young and child generations who spend time in Nikeland. Roblox is a very popular place on the internet, especially for children under the age of 18. In this respect, it seems to be a smart deal

for Nike. Nike does not charge any fee for users to spend time at Nikeland. Nikeland also supports the development of users' creativity. In addition to games, users can engage in activities such as building gardens, exploring the environment, and finding Easter eggs, and are rewarded with prizes such as blue ribbons and gold medals. Users use blue ribbons as building materials and gold medals to unlock locks for virtual goods. Moreover, Nike uses augmented reality technology in its metaverse and aims to make users feel like they are literally in the environment with the help of virtual reality glasses in Nikeland.

Adidas NFTs

Adidas launched a series of NFT collections on 17 December 2021, under the name Adidas Originals, which it determined as a sub-model. The same collection was followed by a follow-up NFT collection in 2022, both digitally and physically. The collection was created digitally and through comics in collaboration with several popular Metaverse players. These include the PFP phenomenon Bored Ape Yacht Club and Punks Comic, a comic book with impressive NFTs. Only 8,000 copies were printed in this NFT collection. Adidas gave early access to these NFTs to users who signed up for the Drop app. The collection is called Into The Metaverse. The user who purchases any NFT from this collection can dress their self-created avatar in the metaverse platform called "The Sandbox" with Adidas products. The user who purchases any NFT from this collection can also purchase physical Adidas products and participate in some events. Adidas has also purchased a plot of land in the metaverse called The Sandbox (Vogue Business, 2021). Adidas paired the yellow Firebird tracksuits with Bored Ape avatars. By dressing the avatars in hats and glasses, they digitally offered their products for sale in the metaverse.



Figure 9. Adidas Bored Ape Yacht Club Virtual Product Project (Complex, 2023)

According to OpenSea data, which is one of the sales platforms of NFTs, it is observed that the NFTs that Adidas first offered for sale were sold for 46 Ethereum coins, a digital cryptocurrency,

whose price amounted to approximately \$156,000 in September 2021. Adidas' Indigo Herz monkey is one of its latest moves in Web 3.0. With these moves, Adidas wants to reflect the style of sportswear in the digital virtual world. With Punks, Adidas is creating an NFT comic telling the story of Indigo Herz. This NFT is very difficult to buy. The NFT series is also noFigure for its collaboration with the Bored Ape Yacht Club moving suit. Furthermore, Adidas has partnered with Coinbase, a crypto exchange platform that can secure its digital assets. Thus, Adidas secured its digital assets (Denis, 2022).

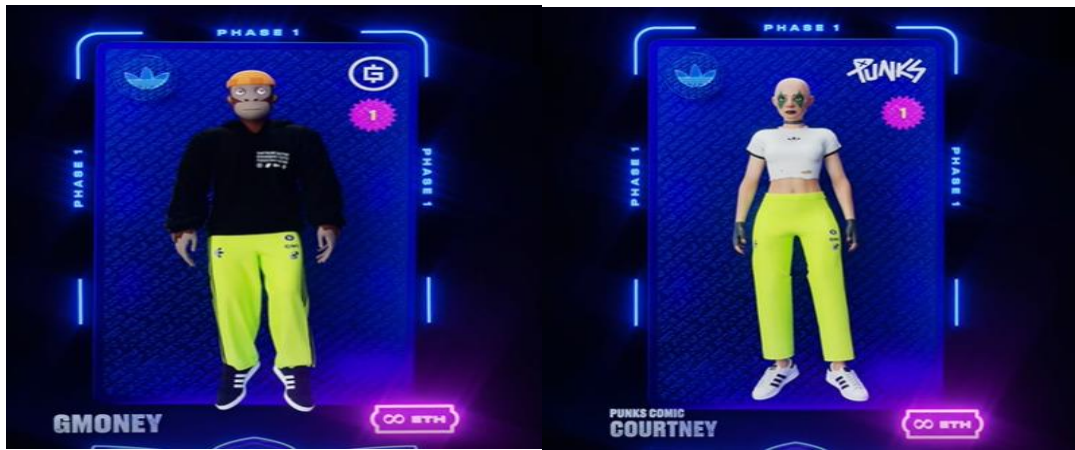


Figure 10. Adidas Gmoney Virtual Product Project and Adidas Punks Virtual Product Project (Opensea, 2023)

Some of the Adidas NFTs are designed with an orange beanie on the head of the Gmoney avatars with a hooded sweatshirt and a yellow tracksuit. As a result of its agreements with companies such as Punks, Gmoney, and Bored Ape Yacht Club, Adidas has released NFTs to digital markets and offered them for sale on digital virtual platforms such as OpenSea where NFTs are sold. In this way, Adidas, like other brands, has enabled users in the metaverse to buy NFTs and dress up their avatars, and at the same time sell their NFTs to other users.

CONCLUSION

Today's world is moving towards a digital universe. Many things that are physically observed, heard, and felt are now moving towards a world where they are observed, heard, and felt in the same way in digital environments. In this sense, in the modern digital age, concepts such as virtual reality, augmented reality, and mixed reality have emerged by combining virtual reality glasses with computer graphics and certain programs for people to realize these sensations. The figure illustrates that transitioning from left to right represents a progression from real environments towards fully virtual ones. These virtual environments, on the other hand, have

given rise to the concept of the metaverse, which has recently spread rapidly from ear to ear, both in trade and socialization areas. The word metaverse was first used in 1992 in Neal Stephenson's book *Snow Crash*. Today, "Metaverse" literally means "Beyond the Universe". There is no doubt that the COVID-19 pandemic period has a great impact on the metaverse becoming so widespread. Furthermore, the fact that Mark Zuckerberg, the owner of the Facebook company, changed the name of the company to "META" also contributed to the echo and development of the metaverse. In the metaverses, a real-world order has been implemented more freely on a virtual platform. Although the order is created more freely than in the real world, it cannot be said that the platform has no rules. Users can trade with their avatars and visit art museums by behaving within the rules set by the platform. metaverses allow digital artworks called NFTs (Non-Fungible Tokens) to be bought, sold, exhibited, and traded through tokens, i.e. cryptocurrencies. metaverses allow users to feel like they are in the environment of a sporting event while watching it. There are also exciting events in the metaverse, such as attending a concert and listening to music. For example, a South Korean KPOP band performed their songs for the first time in an online game called *Portlight* and gave users a musical experience. When we look at the main features of the metaverse, its decentralization, continuity, creative environments, users' avatars, and the socialization of users in this way are very striking. Decentraland, The Sandbox, and Nikeland are examples of metaverses. In Decentraland and The Sandbox universes, users can travel the platform with their avatars, listen to music, earn the platform's coins with their activities, and socialize with each other regardless of their nationality or language. Moreover, in Decentraland and The Sandbox, users can buy land, sell it to someone else, build a business on the land they own, or build their own house. In this respect, it was observed that important steps were taken for humanity. In the metaverse, users can not only travel and have fun, but also trade with NFTs, and non-fungible tokens. NFTs are the foundation of Web 3.0 and are stored in the Blockchain. NFTs are digital art assets. NFTs are traded on Blockchain networks through smart contracts. Platforms such as OpenSea, Magiceden.io, and Solanart trade NFTs. With these NFTs, users can dress up their avatars, which belong only to them. Avatars are virtual representations of users in games and virtual reality environments. It is entirely up to the users to decide how the avatars representing the people in virtual environments should look. Many companies continue to exist in the metaverse. For example, global brands such as Gucci, The Fabricant, Nike, Adidas, and Turkish companies such as Kığılı and Damat found their places in the metaverse. Some companies bought land on the Decentraland platform and some on The Sandbox platform and opened their stores there. It was also observed that Nike

and Adidas, world giants in sports brands, have taken their place in metaverse platforms. In this context, Nike filed a trademark application with the US Patent and Trademark Office, agreed with Roblox, created its metaverse, and established a platform called Nikeland. With this move, Nike offered NFTs of hats, glasses, clothes, bags, and shoes for users to customize their avatars within the Nikeland metaverse platform. It started producing these NFTs by acquiring RTFKT Studio. RTFKT Studio is a company that produces digital products and utilizes Blockchain authentication, augmented reality, and NFTs. In this context, Nike has taken the right step for its benefit and acquired RTFKT Studio. On the metaverse platform, Nike has organized events to encourage its users to play sports in a fun way. It also found a way to generate economic income by selling its NFTs for users to dress their avatars. Before creating the Nikeland metaverse platform, Nike partnered with the online gaming company Fortnite in 2019, utilizing its sub-brand Air Jordan to outfit Fortnite characters with Nike logo sneakers. Another great feature of the Nikeland universe is the accelerometer sensors that allow people to integrate real-life movements into the game. Adidas, another world giant among sportswear brands, has launched an NFT collection called Adidas Originals. The first series of this collection went on sale on December 17, 2021. The continuation of the first series was released on NFT trading platforms in 2022. Adidas made agreements with different companies for the NFT collection. These include Bored Ape Yacht Club, Gmoney, and Punks Comic. The NFT characters of these companies were combined into a collection of clothes with the Adidas logo overlaid on them and offered for sale. These NFTs are not only for users to dress up their avatars on metaverse platforms such as The Sandbox, but Adidas has also provided special discounts on its physical products to users who own these NFTs. Users can also sell their NFTs to other users. The steps of giant sportswear brands such as Nike and Adidas are extremely important. It is an indication that the world is now moving into the age of digitalization. Thanks to these platforms, people can dress up their avatars by going to the stores of the companies mentioned in the aforementioned platforms with special glasses used under the name of virtual reality. At the same time, users can buy the products they like. In addition to these, by liking the physical products in the stores they go to, they can place orders to come to their doors in their physical world. From this point of view, people who want to buy products from sportswear brands such as Nike or Adidas are now able to visit stores in virtual environments without changing the environment while choosing and buying their products as if they were there. All other companies such as Nike and Adidas are expected to make innovations in this regard. Ultimately, it is thought that the media should be used more effectively for as many users as possible to benefit from the metaverses. Additionally, it is

thought that other sports brands taking the necessary initiatives to offer the advantages of metaverses to their customers and other users can provide significant benefits in terms of marketing strategies. Furthermore, it is thought that a study in which users visit the digital stores of brands such as Nike or Adidas in the metaverse with virtual reality glasses and measure the effectiveness of their marketing policies can make a significant contribution to the literature.

Ethics Statement

There is no need for an ethics committee for this study.

Author Contributions

E.V. took part in the design and arrangement of the research, data collection, literature review, and writing phase.

KAYNAKLAR

- Azuma, R. T. (1997). A survey of augmented reality. *Presence: Teleoperators & Virtual Environments*, 6(4), 355-385.
- Cannavo, A., & Lamberti F, (2020). How blockchain, virtual reality, and augmented reality are converging, and why. *IEEE Consumer Electronics Magazine*, 10(5), 6-13. <https://doi.org/10.1109/MCE.2020.3025753>
- Chiu, E. (2021). Into the Metaverse. Wunderman Thompson. November, 24, 2021. <https://www.wundermanthompson.com/campaign/wunderman-thompson-metaverse-experience>
- Coşkun, C. (2017). Bir sergileme yöntemi olarak artırılmış gerçeklik. *Sanat ve Tasarım Dergisi*, (20), 61-75.
- Cotton, B., & Oliver R, (1997). Dictionary of Cyberspace (Ö. Arkan, Ö. Çendeoğlu Translation). Istanbul: Yapı Kredi Culture and Art Publications.
- Denis, M. (2022). Adidas and Bored Ape Yacht Club NFT Project Partnership. <https://www.themanual.com/culture/adidas-and-bored-ape-yacht-club-NFT/>
- Duan, H., Li, J., Fan, S., Lin, Z., Wu, X., & Cai, W., (2021, October). Metaverse for social good: A university campus prototype. In Proceedings of the 29th ACM international conference on multimedia (pp. 153-161).
- Dunne, B., (2021). Adidas, with bored ape yacht club and gmoney, steps into the metaverse, <https://www.complex.com/sneakers/bored-ape-yacht-club-adidas-NFT-hoodie-tracksuit>
- Haberglobal., (2021). Would you spend money on clothes you'll never wear?, <https://haberglobal.com.tr/bilim-teknoloji/hic-gymeyeceginiz-bir-ayakkabiya-para-verir-misiniz-141655>
- Jerald, J. (2015). *The VR book: Human-centered design for virtual reality*. Morgan & Claypool.
- Kalkan, N. (2020). *Virtual reality and instructional design: Virtual reality assisted instructional design model in skill learning*. Akademisyen Kitabevi.
- Kang, Y. M. (2021). Metaverse framework and building block. *Journal of the Korea Institute of Information and Communication Engineering*, 25(9), 1263-1266.
- Lee, L.H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., & Hui, P., (2021). All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda. arXiv preprint <https://arxiv.org/abs/2110.05352>
- Mcdowell M., & Chittrakorn, K., (2021). Adidas reveals new NFT project with bored ape yacht club, <https://www.voguebusiness.com/technology/adidas-reveals-new-NFT-project-with-bored-ape-yacht-club>
- Milgram, P., & Kishino, F. (1994). A taxonomy of mixed reality visual displays. *IEICE TRANSACTIONS on Information and Systems*, 77(12), 1321-1329.

- Nevelsteen, K. J. (2018). Virtual world, defined from a technological perspective and applied to video games, mixed reality, and the Metaverse. *Computer animation and virtual worlds*, 29(1), e1752. <https://doi.org/10.1002/cav.1752>.
- Nike., (2023). Explore nikeland on roblox, <https://www.nike.com/kids/nikeland-roblox>
- Opensea., (2023). *Adidas originals: into the metaverse*, <https://opensea.io/assets/ethereum/0x28472a58a490c5e09a238847f66a68a47cc76f0f/0>
- Özkahveci, E., Civek, F., & Ulusoy, G., (2022). Endüstri 5.0 döneminde metaverse (kurgusal evren)'ün yeri. *Sciences (Joshas Journal)*, 8(50), 398-409.
- Pryor, M., (2021). Fortnite x air Jordan returns with iconic cool grey design & creative map, <https://estnn.com/tr/fortnite-x-air-jordan-returns-with-iconic-cool-grey-design-creative-map/>
- Sivunen, A., & Nordbäck, E., (2015). Social presence as a multi-dimensional group construct in 3D virtual environments. *Journal of Computer-Mediated Communication*, 20(1), 19-36.
- Tokareva, J. (2018). The difference between virtual reality, augmented reality and mixed reality. *Forbes*. forbes.com/sites/quora/2018/02/02/the-difference-between-virtual-reality-augmentedreality-and-mixed-reality/#614c6f4c2d07
- Türk, G.D., Bayrakcı, S., & Akçay, E., (2022). Metaverse ve benlik sunumu. *Turkish online journal of design art and communication*, 12(2), 316-333.
- Ulukan, E. (2021). Nike, NFT'lere ve metaverse teknolojisine odaklanan sanal ayakkabı şirketi RTFKT'yi satın aldı. <https://webrazzi.com/2021/12/14/nike-NFT-lere-ve-Metaverse-e-odaklanan-sanal-ayakkabi-sirketi-rtfkt-yi-satin-aldi/>
- Wang, Q., Li, R., Wang, Q., & Chen, S., (2021). Non-fungible token (NFT): Overview, evaluation, opportunities and challenges. <https://arxiv.org/abs/2105.07447>
- Yıldırım, A., & Şimşek, H., (2018). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin Publishing.
- Zhu, W., Owen, C.B., Li, H., & Lee, J.H., (2004). Personalized in-store e-commerce with the promopad: an augmented reality shopping assistant. *Electronic Journal for E-commerce Tools and Applications*, 1(3), 1-19.