

Exploring the Influence of Advertising within the Metaverse and its Synergy with Non-Fungible Tokens (NFTs)

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Abstract

The purpose of this research is to measure the limitation of the Metaverse in order for businesses to decide their advertising campaigns. This research is going to further analyze the progress of the Metaverse and how big brands have already started to migrate towards it and using creative methods to run advertising campaigns in order to reach out to more consumers world-wide. It will also show what benefit an avatar delivers inside the virtual world. This research will also depict how NFTs are benefitting the advertising campaigns and what possibilities are discovered till now. As the world is progressing, the Metaverse is becoming known to many corners of the world and big businesses have already started their promotions, advertisements and even fully involved themselves by creating a separate team with the desired skills and knowledge to handle their projects inside the Metaverse. This research will try to show possible benefits of investing in the Metaverse and enjoy the platform and its activities for users.

Keywords: *Metaverse, Non-fungible tokens (NFTs), Advertisement, Virtual Reality (VR), Augmented Reality (AR), Cryptocurrency, Blockchain.*

Introduction

Background of the study

The world is evolving rapidly with new technologies introduced every 6 months or quarterly, altering the economic structure. The future envisions a world where most of our lives are spent from home, interacting in the Metaverse, including jobs, social gatherings, and normal hangouts. The term "metaverse" originated in 1992, defining a virtual space alongside the physical world for users to interact from different parts of the world. (Lee, et al., 2021)

Recently the most known person, the owner of Facebook Mark Zuckerberg changed the name to Meta, short for the Metaverse, and also changed the logo to an infinity sign. (Kelly, 2021). His plan is to create a world where people can go into a space and feel like they are actually there. Advertising has always been a key element to an organization's growth ever since it was on print and billboards, to radio, then TV, and now social media. (Wasserman, 2021). Recently Nvidia CEO Jensen Huang also announced that they will be shaping their plans to create a Metaverse (Shapiro, 2021).

Companies are planning to enter the Metaverse and run advertising campaigns as soon as possible to gain an upper hand over their competition, whether they build games or collaborate and buy NFTs. (All the ways marketing and advertising are shaping the metaverse, 2022)

Statement of the problem

Researchers predict that the metaverse's sustainability is hindered by the hype surrounding digital space and NFTs. The hype may lead to financial losses, even bankruptcy. However, celebrities believe the Metaverse is the future, and people are seeking jobs within it. The Metaverse's growth is hindered by factors such as lack of awareness and awareness among millions of people. Advertising and NFTs' link to the Metaverse can help businesses understand its dynamics and make informed decisions, while individuals may explore the space through video games or big organizations' spaces.

Objectives of the study

The objective of the study is to understand the development of the Metaverse and how advertising will take shape to overcome real-world advertisement, along with the adaptability

and acceptance of the Metaverse. This will also help us understand the role of NFTs inside the Metaverse in connection to advertising.

Research Question/s

Will Metaverse live up to its hype?

Are you going to be a part of the Metaverse?

Do you think The Metaverse is the future?

Do you think owning NFTs for Metaverse will be beneficial?

Do you consider The Metaverse a safe place for you to be in?

Do you think advertising will have value in the Metaverse?

Will advertising affect purchasing in Metaverse?

The hypothesis of the Study

H1: The Metaverse gets ready for everyone to use and eventually takes over real-life activities. (MRA)

H2: Metaverse advertisement to overcome real-life advertisement attracting more people inside the Metaverse. (ADVME)

H3: Owning NFTs inside Metaverse beneficial or not. (NFT)

Review of Literature

Facebook has changed its name to Meta, a subsidiary of Instagram and WhatsApp, following a whistleblower's leaked documents. The change focuses on their long-term project "The Metaverse." (Kelly, 2021)

The Metaverse is becoming a target of many critics who are calling it a vague concept or a place where people just feel good, which is created by industries tech giants without having reliable applications that would be useful to users (WORT 89.9FM Madison, 2021). The Metaverse is a fantasy world controlled by time and energy consumption, known as the "black hole of consumption." Critics argue it's an evolution since the internet's arrival and the 2007 roadmap.

(Smart, Cascio and Paffendorf, 2007), which predicted that in the coming 10 years, there will be a digital playground where people would emerge into a world flooded with digital information, diving into the virtual world, which nowadays can be seen through VR (Terdimen, 2007). These predictions were not made only on fantasy, but rather on the emerging technologies that were followed through by the tech giants. After working for years, the leading tech companies can now see the opportunities by mixing certain scenarios in order to create the world they were aiming for, The Metaverse. This is also considered web 3.0. It is believed that the Metaverse is now in its primary stages of beta testing. (Jooyoung Kim, 2021).

Leading firms like Nvidia, Facebook, and Microsoft are adopting the Metaverse trend, selling NFTs on platforms like Decentraland and Sandbox, creating a virtual world resembling the real one (Caulfield, 2021). The players in the Metaverse ecosystem have gateways that provide platform and content. Segmentation and sub-segmentation can be based on who creates the content giving a centralized or decentralized experience (Newzoo, 2021).

Blockchain technology, specifically NFTs, will be used to verify digital asset ownership in the Metaverse. Unreal Engine's Marc Petit aims for users to seamlessly transition between universes, enabling them to use their digital assets in various games.. (Kevins, 2022).

Spatial computing and Brain-computer interface technologies offer opportunities for expanding functionality in industries like industrial workplaces and automotive. Spatial computing enables users to control computing equipment, while Brain-computer interface enables users to communicate with machines using brain signals for external activities, such as prosthetic limbs. These technologies enable direct communication between the brain and computer, enabling users to move cursors and type. (Mystakidis, 2022).

Brands within the Metaverse can create their own Metaverse to control their audience and target various age groups. Augmented Reality (AR) offers the opportunity for brands to test their products and create a new user experience. As the Metaverse becomes fully functional, brands can offer new collections to customers, test products with customer avatars, and create a new generation of influencers using digital humans, Ai-powered humanoids in 3D form. This technology allows brands to program and promote their products and advertisements within the Metaverse, allowing users to break barriers and control their own user experience. (Kadry, 2022).

Businesses that are yet to establish their moves within the Metaverse, or still thinking of starting their reach, will be losing a new reach of consumers, possibly a new generation, and the competitors would be taking advantage of the platform. (CHA, 2022)

The main question being asked around is, what will the role of advertising be in the metaverse? Will the impact and rules be the same? Since it's not fully functioned and explored, the answer remains to be found.

The metaverse can be observed in two ways regarding advertising. It can be an addition to the present methods like the branded mobile app, banner ads, website ads, and social media. Or it can be treated as a whole new medium allowing us to tell a story regarding the brands (Roy, 2021).

Companies have been diving into the Metaverse figuring out the challenges and techniques for advertising, and what role will it play. How will it take shape inside the Metaverse?

Hostler and Andy Dobson, head of technology at Publicis.Poke is curiously researching this space. They believe advertising in the Metaverse would be based more on brand activations and experiences rather than traditional video or displays in the real world (Faull, 2022).

Advertising agencies have been prioritizing the applications for the Metaverse, seeking innovative techniques to benefit their organization. Although the Metaverse and its advertising are in the initial stages, brands globally have turned their focus toward it.

One of the big giants in fashion, Gucci, has already stepped into the Metaverse and released the digital collection of their signature clothing on a video game called Roblox.

The Metaverse has a global reach, meaning developed countries are not alone in using it for branding, marketing and advertising purposes (Kastrenakes & Heath, 2021). Their reasons are fairly similar to the ones related to the use of social media. They aim to reach a wider audience, gain new customers by creating and enhancing their relationships, to interact with potential businesses and employees, to come up with creative strategies, or to simply explore at a low cost. The difference that arises here from the social media is, that the Metaverse provides an immersive and far more realistic and interactive experience to the users. Secondly, the Metaverse gives innovative experiences such as the avatars or Virtual Reality experience. Being in it's

growth stage, there are still limitless ways of experimenting with advertisements inside the Metaverse. (Kevins, 2021)

India took a big step to promote their tourism industry in the Metaverse by developing a personalized virtual world called, India Tourism World. China is known for their traditional medicines, and so, they took the opportunity to promote their culture and medicines in the Metaverse to sell them. Taiwan, known for its tourism and food, created a virtual world for users to interact and experience their culture and cuisine by interacting with the locals in the market. (Taiwan Tourism Bureau, 2021). Celebrities and influencers in development are already using the Metaverse for their branding and marketing reasons. An African DJ, Sbu, in Africa, launched his energy drink “Mosquito”, and gave away free “Mosquito” products to people inside the Metaverse to promote it inside the Metaverse (Herbst, 2021). Pakistan gave the opportunity to small businesses to market and advertise themselves in the Metaverse as Pakistan’s first Metaverse Desk. (Bushell, 2022).

The payment system and transactions inside the Metaverse will be monetized through cryptocurrency or NFTs (Non-Fungible Tokens). The NFT could be a video, 3D object, or any other form of art, that can be dealt in an exchange deal or simply buying and selling. The booming NFT market has previously seen sales in millions of dollars. Even though it’s a trend or a new form of capital investment, it may seem interesting, but, these huge figures sales raise awareness and question the legal aspect of all these. The real-world art sales law dictates about that ownership is two-fold. Where first ownership is credited to the actual physical artwork. And the second goes to the buyer owning intellectual property depending on the deal they signed.

The question remains about the kind of ownership one gets while purchasing digital art in the Metaverse.

According to the International Law firm, Reed Smith states that the ownership inside the Metaverse of digital assets is a form of license, and service provision. Meaning that the true ownership still lies with the creator. This means that the buyers can’t sell it further without the owner’s permission or what was agreed between the two parties at the time of purchase. (Kevins, 2022)

The laws inside the Metaverse are yet to be placed in order to protect users of these incidents. And these issues need to be visited before the Metaverse is fully developed.

Ever since the Covid-19 pandemic, people started getting paid for their actual worth, many people resigned from their jobs in the U.S. and digital assets became more common. According to the Blockchain survey conducted by Deloitte in 2022, about 94% of the capital markets and banking sectors are set to believe that these digital assets will be essential for the next 3 years at least. (Walker 2020). In general, assets are considered as commodities, securities and currencies, but now as the world progressed, digital assets have emerged. Digital assets are basically an ownership of something that's not present in the real world, but in the digital world, including the internet or the Metaverse. The value of these digital assets is determined in the form of cryptocurrencies, which contains the value of real-world traditional currencies, and digitized securities represented through physical assets.

Bitcoin and Ethereum are the biggest digital asset management platforms. These platforms have their own technology and background checks to find out the authentication of their digital assets and document them. The digital asset companies use blockchain as their medium. Initially, the blockchain technology was used to timestamp a document maintaining its privacy (Cohen, 2021). In recent times, blockchain is a decentralized, digitally distributed ledger that exists in the online network, and is public. Meaning, that more than one network can watch the information across all networks and assets. If any changes occur, all networks will be able to see it once it's added at the end of the ledger. Proving that it maintains its integrity while being part of the chain of information. (Sr., Shin, & Kim, 2022)

The top 15 custody banks globally record the value of traditional assets exceeding \$130tn. Compared to this, as of December 2020, the value of digital assets was nearing an unbelievable U.S. \$1tn. (Walker, 2020). Due to the digital location of these digital assets, financial institutions, and governments globally are constantly changing their regulations in order to assess these assets effectively. The custody of digital assets gets tricky. There are three categories that these digital asset holders are divided into, self-custody, custody at an institution or traditional bank, and digital exchange custody. Self-custody is a form of keeping private keys offline, such as passwords or identifiers stored in a location or device, not connected to the internet. Custody

at an institution or traditional bank is the storage of your private keys to a device or storage unit offline.

Europe is actively working on developing a regulation MiCA (Markets in Crypto-Assets) to handle the transferability, custodies, and evaluation of all assets based on the blockchain (Sander, 2021)

Bitcoin was the pioneer of digital assets that gained popularity among people early on. Its blockchain was simpler and easy to follow in the initial stages of digital assets. Bitcoin is the pioneer, creating a pathway toward the creation of digital assets, and the ability to trade between them without the interference of financial institutions. Following Bitcoin, Ethereum has turned up as one of the biggest digital asset management companies. Ethereum Introduced the Non-fungible Tokens in the world, also known as NFTs as digital assets. Traditionally, a fungible asset can be interchanged without any hassle, like money. Like a dollar bill can be exchanged with 4 quarters or 10 dimes. An NFT on the other hand is uniquely coded digital token that has a single digital ownership of an asset. An NFT is the single ownership of the original artwork, asset or digital picture, and in recent times, digital land as well, and it's not easily interchangeable because there is only a single original NFT. Bitcoins can be interchanged as they are fungible tokens. NFTs that have been previously shared a million times can be reproduced, but they won't have the same value as there will only be one original. Kuglar (2021) says, NFTs are helping the art world by developing new ways to look at asset ownership. Some memes and digital artwork were sold for millions of dollars. The first tweet of twitter was sold for \$2.5 billion dollars by the CEO. The ownership of the original however can be transferred depending on the deal between the buyer and owner. The deal may include the owner getting a percentage of royalty from every time the NFT is further sold to other users. (Sr., Shin, & Kim, 2022)

Buying of NFTs is considered an official collectible for some, like trading cards (BBC News, 2021). By looking at the launch of the NFT-based digital game of cards, Doctor Who: World Apart (Murray, 2021), also claimed that NFTs are beneficial for trading card games online. The ownership of NFTs is also known as smart contracts on some occasions that are maintained and overlooked by blockchain technology. The volume of NFT trading in the third quarter of 2021 reached up to \$10.67 billion dollars, marking an increase of 700% more than the previous quarter (Kramer, 2021).

While talking about NFTs security, we are always tracked back to the blockchain technology and private keys security. The overall access of the custodial holding institution or device should only be accessible to the authorized personnel. The security of the digital asset access should constantly be revisited for regular checkups and maintenance. With the advancement of wallet software, new challenges are surfacing in different scenarios. One of which is when the owner loses the private key. It could be lost for several reasons such as theft, or ransomware in the laptop or mobile phone. The recovery of the private key is challenging as it will require alteration of the blockchain which goes against the principal policy of the blockchain. The other issue is where the other party of the smart contract fails to complete their side of the transaction, leading to a rollback. A rollback is a process of returning the blockchain to its earlier version or state (Martins, 2021).

NFTs are yet to be fully understood by the public. Research on it is still limited which focuses on technical aspects, like copyrights, components, protocols, standard and desired properties, and the implications that NFTs have on the art world.

NFT market has been around for over 4 years and has recently started gaining attention worldwide since 2021. The first line of NFTs that got popular was the CryptoKitties, a collection of artistic cat variations used in games on Ethereum, that allowed users to purchase, collect, breed and sell. (Team, 2021)

While brands are rushing toward the Metaverse movement, Metaverse Avenue has already stepped up its game and launched the first-of-its-kind NFT-based advertising. They aim to create a Metaverse ecosystem. Their space consists of interactive billboards where brands can display their product in whatever creative way they come up with, as there are yet limits to be found. The billboard contains multiple blocks, each block can be called an NFT. When someone purchases their token, they will be awarded a block on the billboard, where they can show their brand or product. The best part about this is that whoever owns the blocks, can also rent out their space to other brands or community members and earn from it. The Metaverse avenue plan on creating its metaverse in the form of a game where users can walk along the avenue and complete tasks in which the tokens will be their currency. (Emmanuel, 2022)

There would be a possibility of 5 opportunities for advertisers inside the Metaverse. Firstly, the virtual reality billboards, they are the most accessible and easy to design to insert into existing experiences. Second, sponsored content in social spaces, the current social media has a mix of organic and sponsored content which can be replicated inside the Metaverse and give users the experience of the ads instead of just watching them. Third, Product placement in VR games, as the games keep on developing the need for sponsors will increase, from which the sponsor's products can be placed inside. Fourth, with a new generation of influencers, there is a possibility that Metaverse could feature a new technology as digital humans that would be AI-powered humanoid bots. Brands can make their own bots with product branding or make an influencer to promote themselves. Fifth, in Immersive native ad experiences, brands can create experiences that tell a story, users can interact with the product, try them on and make a purchase inside the Metaverse which would be delivered to their doorstep in the real world. (Roy, 2021)

Tan's article, "*A Crypto Guide to the Metaverse*," tells us that companies have already begun to develop their own virtual worlds where they have countless activities including gambling in casinos virtually or go to theme parks where the users will be able to avail these commodities through cryptocurrencies. In the virtual space, a 259-parcel real estate was sold for over a shocking \$900,000 U.S. Dollars, making it the largest land sold of its kind. Tan (2021) believes that people can buy virtual assets from one game and sell it in another game and vice versa, and use them on interoperable marketplaces. In order to achieve smooth process of this idea, NFTs will need to be utilized.

The most value NFTs can create is in the game industry within the Metaverse for developers and users both. While playing the games, users may have the option to create unique items that they could exchange. Given that every user has a unique set of minds, allowing them to create their own assets inside the game would give a wide range of items that they couldn't think of while building the game. And allowing them to trade it, will benefit the users and the developers as well. However, this process may look simple and effective, but there is always risk of fraud, unfair items and rewards. NFTs could prove to be a viable solution to such issues. A Japanese entertainment conglomerate, Yosuke Matsuda, president of Square Enix, expressed his company's desire to make NFT part of their future portfolio, showing the enthusiasm they have for this phenomenon (Robinson, 2022). The big-league players in the gaming industry, Epic

Games has also expressed their interests in the NFT and blockchain market (Batchelor, 2021). There are many games currently in the market that give the users a virtual world-like experience to users similar to the like of the Metaverse. Its exciting to further see how these big giants are going to utilize NFTs in their ecosystem. Fowler and Pirker (2021) gave idea on the potential of NFTs in several context of games which include, tokenification, consumer-created content, blockchain-based games, crypto assets and collectibles in games regarding of the challenges. Moving along, Choi et al., (2021) shows that NFT games that were developed. Their in-game items could differentiate between the games eco-systems available at the market and proving it beneficial for the customers as well. Ever since the concept started, NFTs have only been seen as a form of digital artwork with no options of replications and everything in the form of ownership of the art projects, in-game assets and a lot more. Authorities have been actively working on techniques to monetize NFTs, and virtual horse riding is one of those days. Back in October, it was announced that a game called “MetaRace” will be launched inside the Metaverse, which is a horse racing game. Designers were given the opportunity to use the blockchain to design custom parts of the mechanical horse inside the game to be used in the race. The horse was divided into 6 categories, such as, Engine, Front and back leg gears, Horseshoe, Electrical reins and horsehead, along with other parts. These parts can be bought or sell by users through as NFTs.

Another horse racing game that exists in the Metaverse is the ZED Run. The users in this game have the ability to buy, sell and breed their horses to build them up for the use of racing. (Hackl, 2021) Horses had costed up to a whopping \$36000 U.S. This game attracted users globally, reaching a limit of 100,000 users globally. The hype behind this game allowed them to start getting sponsors and advertisers. Stella Artois, a key member of Budweiser Brewing partnered with the game ZED Run. (Sr., Shin, & Kim, 2022)

As the Metaverse trend keeps growing and businesses have started investing their resources in Metaverse, many brands are following the same lead. Big brands are creating their own universe where they offer a high-end immersive experience to the users’ avatars. (Mileva, 2022)

When Covid-19 struck and the pandemic was announced, the tourism industry suffered as travel was closed, due to which hotels and resorts faced a heavy loss. Some hotels and resorts shut down due to high operational costs with little to know customers that would cover their expenses. Sentosa made up their mind to survive this pandemic and to overcome their challenge, they associated

themselves with the virtual reality multiplayer game, Animal Crossing. Sentosa created a real-world island inside the game where players were welcomed to spend time and enjoy their resort's amenities. (Mileva, 2022)

Summary of Literature Review

With this review, we are able to examine the progress of the Metaverse and how people along with big brands are migrating their strategies towards the virtual world in hopes to engage with a broader audience and come up with unique strategies to overcome their competitors. There are various forms in the Metaverse that companies chose to come up with advertising campaigns such as the Metaverse games or creating their own virtual worlds.

NFTs are directly linked with the Metaverse as any digital asset inside it will be and NFT and it can range from anything, like digital art, land, billboards or wearable products in the Metaverse.

There are still many challenges inside the Metaverse regarding its reliability such as the identity theft. For example, how will a person be sure if the user using the avatar is himself or identifying themselves as someone else.

Research Methodology

This is going to be quantitative research. Firstly, a demographic form will be filled out by the participants that will include information about their age, gender, education, marital status, and occupation. Moving forward, they will be led to the questionnaire where they will be given options to select from (Dichotomous Scale).

Population of the study and Sampling technique

This sample will consist of 150 participants starting from the age of 15 and above. The sampling method used for this research will be convenience sampling. Convenience sampling is a method of collecting data easily accessible for the researcher around a location or on the internet. This is a non-probability sampling technique where the population is conveniently available to the researcher. This is the most commonly used technique as its feasible and not complicated.

Research Design & Variables

This is going to be descriptive research, where we will analyze the key role advertising will play in the Metaverse. This methodology in this research is quantitative where a summary and

conclusion will be conducted after gathering the required data through questionnaires. The participants will require to fill out a demographic form where they will be asked about their gender, age, education, and which social media app they engage in the most. After that they will be lead towards filling out the questionnaire where they will have to select the options of Yes, No, or Maybe following the Dichotomous Scale. Furthermore, the hypothesis will be an additional help in analyzing the effect of advertising in the Metaverse.

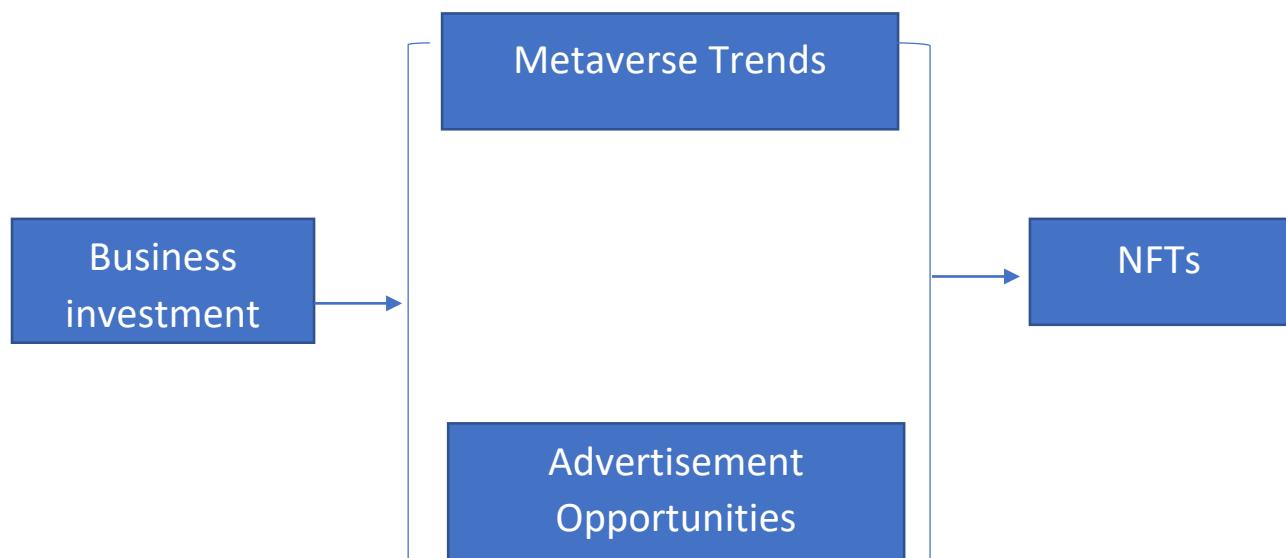
The independent variable will be:

- The Metaverse
- NFTs
- Advertising
- Crypto Market

The dependent variable will be:

- Consumer buying behavior
- Business investment

Conceptual Framework



This conceptual framework indicates the business's decision making inside the Metaverse based on the trends and advertisement opportunities. The advertisement campaigns will be run with the help of NFTs as digital assets inside the Metaverse.

Instrument

The data will be collected through a survey questionnaire from via Google forms. The age limit for the survey would be 15 years and older without any gender restriction. The instrument to be used for the calculation of data will done through SPSS.

The primary data for this research will be collected through questionnaires based on a Dichotomous Scale by giving the options of “Yes, No, and Maybe” to choose from. This will help determine elements and customer opinions about the Metaverse.

The questions are based on general concerns of people regarding the Metaverse and their understanding of the Metaverse.

Procedure

Participants were reached out through various means of social media that included Instagram, Twitter, Facebook. Many groups were used online to reach people and participate in this questionnaire. University students were reached out as well.

Data Analysis and Results of the Study

Results

The variables in this result are as follows:

MRA: Metaverse taking over Real-Life Activities.

ADVME: Advertisements inside the Metaverse to overcome real-world advertisement.

NFT: Non-Fungible Token

Table 1

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.749	.769	11

Table 2
 Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.232	.037	.487	.450	13.207	.010	11

Table 3
 Scale Statistics

Mean	Variance	Std. Deviation	N of Items
11.45	14.182	3.766	11

Regression

Table 4
 Descriptive Statistics

	Mean	Std. Deviation	N
MRA1	.97	.484	150
ADVME1	1.17	.599	150
ADVME2	.97	.639	150
ADVME3	.96	.759	150
ADVME4	1.10	.515	150
ADVME5	1.06	.481	150
ADVME6	1.17	.628	150
ADVME7	.59	.795	150
ADVME8	1.07	.702	150
ADVME9	1.05	.712	150
ADVME10	1.18	.635	150
ADVME11	1.13	.501	150

Table 5

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.686	.136		5.049	.000
	ADVME1	.092	.083	.114	1.111	.269
	ADVME2	.060	.077	.080	.787	.433
	ADVME3	.010	.057	.015	.173	.863
	ADVME4	-.027	.098	-.029	-.274	.785
	ADVME5	.164	.099	.163	1.659	.099
	ADVME6	.024	.074	.031	.326	.745
	ADVME7	-.052	.053	-.086	-.973	.332
	ADVME8	-.007	.064	-.010	-.111	.912
	ADVME9	.028	.061	.041	.455	.650
	ADVME10	-.041	.068	-.053	-.596	.552
	ADVME11	-.008	.097	-.009	-.086	.931

a. Dependent Variable: MRA1

Table 6

Correlations

		MRA1	NFTS1	NFTS2	NFTS3
Pearson Correlation	MRA1	1.000	.153	.207	-.020
	NFTS1	.153	1.000	.458	.332
	NFTS2	.207	.458	1.000	.386
	NFTS3	-.020	.332	.386	1.000
Sig. (1-tailed)	MRA1	.	.031	.006	.406
	NFTS1	.031	.	.000	.000
	NFTS2	.006	.000	.	.000
	NFTS3	.406	.000	.000	.
N	MRA1	150	150	150	150
	NFTS1	150	150	150	150
	NFTS2	150	150	150	150
	NFTS3	150	150	150	150

Table 7

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.788	.111		7.113	.000
	NFTS1	.088	.081	.100	1.090	.278
	NFTS2	.176	.077	.213	2.273	.025
	NFTS3	-.106	.070	-.135	-1.528	.129

a. Dependent Variable: MRA1

Summary and Discussion

Summary

With the progressing world in terms of technology, we're experiencing innovation at a faster pace than ever before. Among all the innovations comes the Metaverse. A virtual world where people can dive into, create their own avatars and spend their time doing countless activities like play games, attend concerts, interact with other people from all over the world, shop and a lot more. Businesses are leaning towards the idea of Metaverse and planning their advertising campaigns in accordance to the dynamics of the virtual world. Many businesses have already stepped into it and have come up with innovative ways to promote their brand.

This report helps point out the possible benefits of the Metaverse for business owners, small or big, and help them make smart choices in order to invest in the Metaverse.

This report also looks at how NFTs are beneficial in the Metaverse and how they are linked to advertising for businesses along with individuals inside the Metaverse.

The results of this report through data calculation from SPSS will show the demand and opinion of people regarding the Metaverse through a questionnaire survey and how advertising campaigns will have an impact inside it.

Discussion

The aim of this study was the find the impact of advertising inside the Metaverse and how NFTs played a vital role towards it. The hypothesis "The Metaverse gets ready for everyone to use and

eventually takes over real-life activities”, “Metaverse advertisement to overcome real-life advertisement attracting more people inside the Metaverse”, and “Owning NFTs inside Metaverse beneficial or not” were proven correct. This means that people agree to the fact that the Metaverse will eventually be taking over the real-world advertising as it is the future, and NFTs will be a vital role inside the Metaverse as they will be the means to trading digital assets, or launching wearables in case of fashion brands, lands in case of real estate and a lot more.

The results of the questionnaire showed that 76.3% of the people selected for this survey had knowledge about the Metaverse and a total of almost 62% thought that Metaverse is the future for advertising companies or businesses. Increasing usage of Metaverse tends to bring more users and businesses in the space, giving benefits and helping it grow.

An issue regarding the Metaverse has been the security and reliability. If a user’s avatar shows up, what guarantee is there that the person controlling the avatar is actually who they say they are. Identity theft may be easy as no dynamics have yet been set by the Metaverse regarding it. Businesses that invest in the Metaverse through the blockchain need reliability for their investment, to know their data is safe.

Practically looking at NFTs, they can be a valuable digital asset that secures a digital asset’s originality. Items or digital assets inside the Metaverse could be duplicated or replicated as the Metaverse can either be created from scratch or depict real life. Due to which, it will be essential to secure originality of the assets to sustain the Metaverse. If the residents in the Metaverses start trading digital assets through cryptocurrencies, security becomes more important. (Sr., Shin, & Kim, 2022)

Applications throughout the world that needs to link themselves with the Metaverse should have the technology to adapt the Metaverse. Without prior knowledge of the Metaverse, apps will face being obsolete as they will be outdated. Eventually all apps will focus towards Metaverse as it is the future of the internet, and the apps that don’t align themselves with it may face a downfall in downloads. Even education would be aligned with the Metaverse so the educational apps may need to be compatible as well. (Dahan, et al., 2022)

Finally, the social impact of the Metaverse may not completely overcome the entirety of the internet as its still developing, and it could take years for major population around the world to

adapt the Metaverse idea. (Smart, Cascio, and Paffendorf, 2007) And as Mark Zuckerberg confirmed in his interview, advertising would be an essential part of the Metaverse. (Associated Press, 2021)

Conclusion

The Metaverse is a promising space for innovations and a revolutionary step in terms of technology. This space has given the opportunity for many businesses to grow and develop with time. The advertising industry along with many others have received an opening to achieving new milestones, as the possibilities of growth and creativity of the Metaverse are limitless as they are yet to be defined. Many businesses follow the leading organizations in the industry like Nike, Gucci, Ferrari and many others to stay ahead of their competition. Observing their achievements inside the Metaverse, they have a basic understanding of the possibilities to promote their brands and now they just have to plan their campaigns accordingly. While diving into the Metaverse, having knowledge about NFTs and how they work is essential because ultimately, whatever digital asset you own inside the Metaverse will be an NFT. For example, the fashion brands launching their digital apparel and wearables for the avatars will be an NFT. Ferrari launching its car within Fortnite is an NFT since that's a digital asset. In the grand scheme of things, advertising inside the Metaverse cannot be done without an NFT. The final conclusion for this research proves that businesses need to start developing their strategies to align with the Metaverse and promote it as the space will only get bigger in the future.

Findings & Recommendations

Findings:

- People agree to the Metaverse taking over real-world advertisement.
- Owning of NFTs inside the Metaverse is essential for trading, purchasing, and promoting.
- Metaverse is yet to be fully discovered for its limitations.

Recommendations:

- People using the Metaverse should understand their data is being used for advertisements just like social media.
- Businesses need to adopt to the Metaverse.

- Innovative industries have an open place to experiment in terms of technology.
- There may be loopholes in the Metaverse which need to be addressed for security reasons.
- Businesses need to host training session for their employees to understand the Metaverse in hopes of migrating their operations in the virtual world.
- Education industry has the opportunity to present a much more immersive learning experience to students inside the Metaverse by showing visuals and other methods that would not be possible in the real-world.
- Further research may be required to fully understand the limitations as only 150 participants are not enough to determine the reliability.

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