

MASTER'S DEGREE IN MANAGEMENT

Final Thesis

CUSTOMER BEHAVIORS TOWARD THE METAVERSE METAVERSE AS A STIMULUS FOR CUSTOMER EXPERIENCE: IMPLICATIONS FOR MARKETING

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Important terminologies and definitions:

Metaverse: a virtual world where users can communicate with each other and a computer-generated environment.

Web3: Web3 was described as the alleged next generation of the web's technological, legal, and payment infrastructure in a policy paper released by the University of Cambridge. Web3 includes blockchain, smart contracts, and cryptocurrencies.

Roblox: Roblox is a platform for online gaming and game development built by the Roblox Corporation that enables users to create games and play those made by others.

VR: Pose tracking and 3D near-eye displays are utilized in virtual reality to provide users with an immersive virtual world experience. Virtual reality has applications in business, education, and entertainment.

AR: The reality and computer-generated contents are merged in augmented reality, an interactive experience. The information can be presented in a variety of ways, including visually, aurally, haptically, somatosensorily, and olfactorily.

Blockchain: a mechanism in which a history of transactions is kept across computers connected in a peer-to-peer network, notably those made in a cryptocurrency.

Cryptocurrency: a digital currency that operates as a medium of trade over a computer network and is not backed or maintained by any single central authority, such as a bank or government.

NFT: A non-fungible token is a distinct digital identification that is used to verify ownership and authenticity and is maintained in a blockchain. It cannot be copied, swapped, or divided.

1. ABSTRACT:

The concept of Metaverse has been developing crazily since the hit of the Pandemic in 2020. Metaverse is known as a network of 3D virtual worlds that focuses on social connection. As shown a lot in science fiction and futuristic movies, Metaverse is often described as a hypothetical iteration of the internet as a universal virtual world that is facilitated by the use of virtual and augmented reality headsets. Some metaverses involve the integration between physical spaces and virtual economics.

Since the pandemic, with the fact that a lot of companies change to remote working, consumers start to use the more internet for shopping and interacting, people start to discover the huge advantages of the virtual world and eventually switch their behavior from face-to-face interaction to online interaction (Elmasry et al., 2022, Wunderman Thompson, 2021). Taking advantage of this fact, more and more companies have been starting to extend their business in the virtual world and MC Donald's has been seen as the pioneer. This "world's largest fast-food chain" wants to offer its customers a virtual restaurant in the metaverse and will also do the delivery physically. Together with the development of virtual economics (non-fungible-tokens (NTFs) and crypto have been becoming popular on almost all platforms), the brand will sell its virtual food and beverage products as NTFs, thus, instead of eating a special Big Mac, in the very near future we will able to own one as a digital surrogate and avoid cholesterol together. The same concept was applied by Transmira in the Bitcoin space. It was setting the pace with its Omniscape XR platform which combines the best of virtual and augmented realities. During CES, the biggest consumer electronics show in the world, which took place in January, Omniscape was ranked among the top three innovations.

This paper aims at finding the answer to the question "If Metaverse really will bring value for customers or is it a stimulus for customer experience in terms of marketing. Besides, it is anticipated that in response to the increasing use of Virtual Reality, will Metaverse be the perfect innovation in selling and marketing to customers, or it will become forgotten

in the near future to make room for other innovations? And is it the potential marketing trend and opportunity for big brands to apply Metaverse?

CHAPTER I: INTRODUCTION

1. Research Rationale

1.1 Research Gap

The research aims at analyzing how effectively marketing works in the metaverse to generate positive consumer experiences. With an increasing number of companies investigating the potential of the Metaverse (a 3D virtual environment where users may interact with each other and virtual items), this is both contemporary and very important. The limited amount of existing research on marketing in the metaverse may represent a significant research gap in the subject. Since the metaverse is a recent phenomenon, many firms are just starting to look into the prospects it offers. As a result, the conceptual understanding and theoretical framework of how marketing functions in the metaverse may be constrained. This can make it challenging to establish research questions that can be empirically tested and to formulate hypotheses. The inadequate understanding of consumer experience in the metaverse represents another possible research void. Although there is an expanding body of research on customer experience, the metaverse is a particular setting that offers fresh difficulties and possibilities. Although it is unknown how marketing initiatives in the metaverse might encourage satisfied customers, this is a field that may benefit from further research.

Furthermore, there may be limited research on the application of sentiment analysis and content analysis in the context of the metaverse. Although these approaches are frequently employed in research, the metaverse is a novel and distinct context, therefore it is not certain how well these approaches will work there. The integration of social media and the metaverse may also be lacking. Although social media is a valuable commercial tool, it is unknown how social media discussions can influence marketing plans in the metaverse. Additional studies on this subject may yield insightful information about how

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businesses may use social media to better understand their clients and develop more successful marketing plans.

In summary, identifying the research gap will require a thorough review of the existing literature and careful consideration of the unique challenges and opportunities presented by the metaverse. By identifying a clear research gap, we can develop research questions and hypotheses that will contribute to the development of a theoretical framework and provide a solid foundation for the research.

Research significance

Considering the research gap this research is expected to provide a perspective of consumer behavior toward the Metaverse experience, and the significance for both research and business segments.

For the researchers: In addition to addressing concerns about the customer experience and innovative technology trends in the modern market, the study is anticipated to contribute to the overall research effort on advertising communication and pave the way for future research on the Metaverse in the application for marketing. Examining the phenomena of virtual reality from the viewpoint of understanding audience response reveals internet users' perceptions of the communication message that touches on modern technologies. The study would be used as exploratory research, a source of information for any academics interested in examining businesses that attempt to incorporate customers' concerns about the Metaverse into marketing strategies, their motivations, and the possible impact of these elements on the consumers' psychology, attitudes towards the brands inside the Metaverse.

For the marketers: The report serves as a resource for digital advertisers that need to think about using innovative technologies in communication and enhancing customerbrand relationships. Although the practice of utilizing the Metaverse in advertising is not new in Western markets, it is still a novel and potential platform for digital marketers and brands to explore. Hence, it is important to adapt to the revolution of technologies with consideration for the perspectives of internet users.

1.2. Research structure

Chapter 1- Introduction: This chapter provides a thorough knowledge of the research topic of Marketing in the Metaverse and customer behavior toward this phenomenon and justifies the importance of the study by identifying its goals and objectives.

Chapter 2 – Background: As a foundation for further identification and definition of the Metaverse, what are its features and its components? This chapter also provides case studies of what are big brands currently doing in the Metaverse and how they apply in Marketing.

Chapter 3 - Methodology: In this chapter, the research design method is explained in detail and supported by justifications. It will explain numerous methodological decisions in terms of philosophical underpinnings, strategy, data collecting, and analysis. The limitations and ethical issues will also be covered.

Chapter 4: Research findings and analysis: The chapter combines two significant sections. The first section shows a summary of the interview results in line with the major themes of the research, and the second half goes into more detail in its interpretations of the research results and explores them in light of the ideas that were presented.

Conclusion: The final section includes a summary of the research findings and their implications, as well as suggestions for further.

Aims and objectives

Given that Virtual Reality is a novel technology to general internet users and customers as well as brands, this research was created to address the aforementioned issues. The objective of this paper is to understand how to provide a positive customer experience in this dynamic environment. how marketing strategies may be used to draw in and keep customers in the Metaverse? And how the marketing trend would look in the future with the dominance of the Metaverse. In order to achieve these goals, the study is designed to use content analysis and sentiment analysis from social media to identify trends and themes in how consumers respond to marketing campaigns. While content analysis focuses on text, images, and other forms of communication, sentiment analysis examines the emotional tone of social media posts to understand more about how people feel about a specific topic. By employing these methods, the research aims to gain a greater knowledge of how marketing initiatives impact the customer experience in the metaverse

and how businesses can use this insight to develop more effective marketing strategies. However, it is important to identify any potential gaps in the existing literature that need to be filled before the research can be carried out. Understanding what has been previously examined and what areas are still under or unexplored will come from a thorough assessment of the literature. The identification of research gaps will provide a foundation for the development of research questions and hypotheses, which will contribute to the development of a theoretical framework for the study.

CHAPTER II: BACKGROUND

2.1 The Metaverse Innovative Technology

The world in which humans living in is always changing, people started to get more and more familiar with the term "innovation", and new technologies are born every day to innovate and make people's life better and easier. Since the pandemic, one of the gates has become the most popular and has quickly been developed and improved for humanity to the virtual world turning the impossible into the possible (Nabity-Grover et al., 2020). This gate also opened a new opportunity for a lot of different industries to grow.

2.1.1 Definition and its components:

The basic definition of Metaverse is a combination of virtual augmented and mixed reality involving a three-dimensional physical environment. A three-dimensional physical world combined with virtual augmented and mixed reality is the basic description of the Metaverse as defined by Davis et al. (2009). The convergence of several fundamental components of civilization, including trade, money, social connections, the economy, and property ownership, with digital experiences that mimic the real world, is what makes this possible. (BasuMallick, 2022). Or in a simpler definition, Dionisio et al. (2013) defined the Metaverse as generating a three-dimensional image accessible through a browser, a headset, or a mobile app which appears to surround the user as a digital environment populated by virtual avatars display representing actual people behind it. Imagine Fortnight, a virtual reality game where avatars engage in real-time combat and players can take part in events that take place in that Metaverse, to better understand the term.

Every user playing in real life creates and owns their avatar and plays Fortnight with their personalized digital representation (Faridani, 2022).

The universe of Metaverse is limitless and seamlessly connected containing endless potential, objectives, and life-changing events. Metaverse has been seen as an open space where the physical and digital worlds can coexist and change some foundational areas of daily life. In another word, it is an interconnected virtual community allowing users to socialize, communicate, and collaborate with the assistance of virtual reality headsets, mobile phone apps, AR glasses, and other technologies making the environment livelier (Lee et al., 2021). The Metaverse first appeared in Snow Crash 1992 and then was discussed generally in the study "Second Life environment" in 2006. In comparison with the past, there are a variety of differences between the modern Metaverse (also known as the new Metaverse) and the previous Second Life Metaverse. Firstly, the new Metaverse is more realistic and natural offering better immersion and higher recognition performance than the previous one did. Secondly, while the previous Metaverse uses PCbased technology, the new one uses smartphones and mobile devices to develop accessibility and continuity. Thirdly, the new Metaverse services of economic stability are now much-improved thanks to the development of security technologies for instance virtual currency as well as blockchain. Lastly, since the last pandemic caused by covid-19, the limitations of offline social activity and interaction have increased interest in the virtual world and made it the principal aspect of daily life (Yogesh K. Dwivedi a b et al., 2022). Therefore, Metaverse has been always seen as a new opportunity to grow not only in marketing but also in other important sectors.

Metaverse composes of different elements including the environment that users are immerging in, the Metaverse interface, social networking, and the value for society.

The environment

The environment of Metaverse contains realistic and unrealistic elements. The Metaverse realistic environment imitates the geographic as well as the physical factors based on the goals and interpretation of designers (Schroeder et al., 2001). In this environment, it is impossible for one avatar exists in two different places and the movement speed is limited as the way it is in the real world. This factor successfully gains the advantage of being capable to deliver experiences in the way that is closest the reality, for example, an event

orientation or exhibition visit. Nevertheless, while visual modalities and sound systems are fairly realistic, some limitations cannot be solved at the moment such as the atmosphere, smell as well as some tactile sensations.

In contrast, the Metaverse unrealistic environment allows users to enjoy barrierless time and space (Papagiannidis & Bourlakis, 2010). It has the capability of letting users freely utilize without physical constraints and create unrealistic objects; thus, the users explore things that have never been experienced or explored in real life (e.g., space exploration). However, the unrealistic world has less sense of reality; consequently, worldview consistency and a delicate environment are strictly required.

There is also another called the fused method that is combined realistic and unrealistic; thus, it contains the advantages of both other methods (Choi & Kim, 2017). The Metaverse of this environment includes an augmented method that adds the virtual factors according to the realistic world, while the virtual method creates a new world with reality's laws. It is essential to illustrate how well virtual objects are combined with real ones in the augmented method. However, the virtual environment is more complicated than another one, though this method can deliver user experiences that were impossible in comparison with an unrealistic one. However, recreating a fictional world based on reality is complicated considering the complexity of redefining the rules and reconstructing the real world.

The Metaverse Interface

As stated before, there are three main methods including physical, immersive, and 3D methods. The 3D method is not considered an essential element of Metaverse, though a lot of Metaverse environments are composed to have a 3D form (González et al., 2013); consequently, many people and papers defined Metaverse as the expression of a "3D virtual world". Although the 3D element has the advantage of being able to deliver the experience close to real life, there is a disadvantage of service continuity in which the method requires comparatively high-performance digital gears.

On the other hand, immersion is considered an important element to inspire users to participate in the Metaverse while maintaining the continuous world (Jaynes et al., 2003). To accomplish immersion, a physical tool (such as VR) is used to replace the user's real visual sense. Imagine that you have an interview with employers in another nation, instead of flying to that country, you can have an avatar's face–to–face conversation that

would be time and cost-efficient. Excessive immersion, on the other hand, causes psychological issues (e.g., separation from reality). Furthermore, negative feelings and emotions occurring in the Metaverse can spill over into the real world, causing social problems (e.g., identity confusion and addiction).

As characteristics of a realistic Metaverse, physical components (such as inertia) are also highlighted. Although reflecting physical aspects in the interface is a good method to add realism, the realism that can be achieved with present technology is insufficient (Amorim et al., 2014). For reflecting physical aspects, there are tactile and visual techniques. For instance, employing VR suits and gloves, direct tactile contact helps with physical experiences. Additionally, visual features like a ball bouncing and realistic water rippling support realism. However, it is challenging to communicate tactile feelings, such as handshakes and hugs, using avatars, and rendering software are burdened by the application of physical laws to a large space.

The Social Networking

Also known as interaction, it is challenging to define and use the social networking experience in the Metaverse effectively. Additionally, there is growing interest in collaborative value creation that goes beyond individual VR experiences. Natural dialogue is maintained via persona dialog by mirroring the traits of NPCs (Zhang et al., 2018). Numerous studies have discussed the significance of networks because user participation is what sustains the Metaverse. Some claim that social networking sites (SNS) and the Internet combine to form a virtual environment (Nevelsteen, 2018). This network service connects people's interactions and is a valuable tool for growing the Metaverse. The majority of Metaverses focus on user interaction online, however, for privacy reasons, it is also important to take into account an offline Metaverse and an individual Metaverse. For the Metaverse, cooperation, and communication are key values (Zackery et al., 2016). User avatars are able to communicate and exchange knowledge. Through this sharing and collaboration, they produce new value. This partnership allows us to transcend time and location, unlike in the real world. It also gives users a reason to interact with one another and keeps the Metaverse's social functioning. Though it is easy to misunderstand or incorrectly judge concealed intentions because communication is based on sensor information that is limited in comparison to reality.

It's crucial to communicate with Metaverse NPCs who have personalities (such as preferences or hobbies) (Kwanya et al., 2015). People's experiences in the Metaverse are continuously expressed and expanded through the discussion. We must take into account both user-to-NPC and user-to-user dialogues. The Metaverse allows for communication with objects and animals in addition to human-type NPCs. Conversations in the Metaverse frequently go beyond what is reasonable. A safer control mechanism is required since user expressions sometimes contain aggressive language.

Value for Society.

Metaverse has made the world we are living in become much easier, though there is always one question of "If Metaverse provides any new value for the society or not?". In order to provide social values and maintain a strong Metaverse, sustainability, and multidisciplinary research are crucial.

Sustainable development is crucial for the Metaverse (Papagiannidis & Bourlakis, 2010). In addition to being a tool to enhance the physical world, the Metaverse also acts as its target. Allows users to share their unique experiences and learn new things thanks to the Metaverse. Thereby, users enhance their financial riches, produce new products, and get the chance to display a different aspect of themselves. However, these social activities have platform limitations, therefore consistency is required (e.g., worldview).

The Metaverse can advance as a society beyond being merely a 3D environment and physical applications thanks to interdisciplinary study (Rehm et al., 2015). The Metaverse necessitates a diversity of ideals and fresh ideas beyond straightforward gaming and social networking. A revolutionary viewpoint is necessary to understand the philosophy, psychology, sociology, culture, economy, and politics of the Metaverse. Instead of only adopting formulas from the real world, it is vital to take an advanced approach.

2.1.2 Different layers of Metaverse

In recent years, Metaverse technologies have been developed and improved thanks to the investment of some tech giants such as Amazon, Microsoft, Google, Shopify, Meta Platforms, Epic Games, and many more. Research from Emergen Research 2021 pointed out that in the year 2020, Metaverse was valued at about \$47 billion, and in six years from now, it would reach \$829 billion. US famous social media Facebook is repositioning itself

as a leader in the global metaverse, a move that might have a great impact on the market in the near future. As a result, it is a great advantage for all the brands to deeply study and apply Metaverse in their business.

The Metaverse is comprised of seven layers, each of which reflects a major element that works in collaboration with the other six levels to create the Metaverse and all of its immense potential. Therefore, in order to optimize the benefits of the Metaverse and maximize the value of its application, it is necessary to understand the layers.

The first layer is an experience where all the companies and brands providing experience located as be shown in fig.1. The majority of individuals seem to be focusing on the first layer of the metaverse right now. The experience users have in technologically advanced contexts is the layer we are referring to here. Through experience, the user engages with content, shopping, NFTs, sports, virtual worlds, video games, digital products, and more. The gaming industry is likely the best example of the different aspects of the metaverse, such as avatar identities, immersion in fantasy worlds, storytelling, evolution, and realtime social interactions. Just take a look at what brands like Xbox, Activision Blizzard, Roblox, Minecraft, and Fortnite have to offer in terms of online and digital gaming experiences (Verma, 2022). Physical space may no longer be limited by physical restrictions due to the metaverse's digitalization of it. Virtual reality in the metaverse has the power to deliver experiences that the real world will never be able to. This is a critical driver of why many renowned businesses are spending money on MILEs or significant interactive live events. In the first layer of Metaverse, there are various typical cases where the physical and virtual worlds collide and mix can also be found, including Peloton home workouts, Zoom business meetings, and Alexa assistants in the kitchen (Verma, 2022).

The second layer called Discovery outlines how consumers may discover new experiences or platforms via app stores, search engines, review websites, and display advertising. The vast majority of discovery platforms may be classified as either inbound or outbound. Finding new technologies, protocols, and communities requires a critical period (Team X.R.T, 2022).

The Creator Economy corresponds to layer 3. Typically, the Metaverse offers design tools that make it possible to create content without knowing how to program. As a result, there are more content producers. They also offer a marketplace where this content can be sold. This is reflected on numerous Metaverse platforms, including The Sandbox, which

makes the creation of digital assets incredibly straightforward and code-free (Delb, 2022).

The fourth layer is equivalent to spatial computing. This layer makes it possible for the virtual and real worlds to coexist. In order to digitize the real environment, spatial computing integrates the usage of Virtual Reality, Augmented Reality, the Cloud, sensors, and spatial mapping (Delb, 2022).

Decentralization, which corresponds to layer 5, enables Metaverse to be independent of a centralized authority. Metaverse, on the other hand, is free and widely available. The interconnectivity of Metaverse will result in a tenfold increase throughout the richness of Metaverse. Creators have complete control over their own data and work thanks to decentralization. The backend of services can now be provided with fewer efforts thanks to distributed computing and microservices (Delb, 2022). This sixth layer describes the tools that let users engage in complex human-computer interaction (HCI) while exploring the Metaverse. In essence, it consists of haptic technologies, smart glasses, and VR headsets that allow users to traverse virtual environments. Using tools like Google Glass or Project Aria from Meta Platform, users will be able to learn more about their environment (Team X.R.T, 2022).

The technologies in the seventh layer make earlier concepts a reality. To boost network capacity and reduce congestion and latency, a 5G-capable infrastructure is necessary. The gadgets included in the human interference layer also require parts like semiconductors, microelectromechanical systems (MEMS), and tiny, long-lasting batteries to operate properly. Technologies that support the Metaverse include Wi-Fi, the blockchain, artificial intelligence (AI), cloud computing, and graphics processing units.

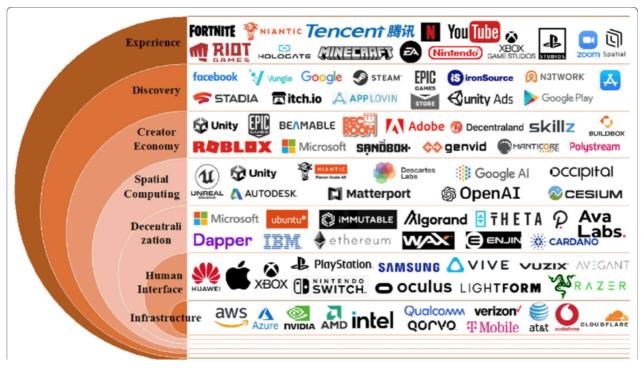


Figure 1: Seven layers of Metaverse and the Market map (researchgate.net)

Metaverse Features:

What characteristics define a metaverse? The Metaverse is always active, existing in real time, participants have individual agency, it's a self-contained and fully functional universe, and it features user-generated content, according to "Influencer Marketing Hub" which does an excellent job of breaking down the components. It is "always active", even when you leave a metaverse, it doesn't stop or end. They just keep going continuously. Metaverse "exists in the present", a timeline in the metaverse corresponds to the time in the physical universe. Each player has their agency. Players can perform multiple tasks simultaneously. While others are talking with one another, one could simply be sitting still in a corner. Another plus is a fully functional and self-contained universe. Users can construct, own, sell, and invest in the metaverse, a fully functional universe. In the metaverse, users can also be commended and compensated for their efforts.

In the metaverse, several platforms can cooperate. In video games, for instance, you ought to be able to transfer stuff from one game to another. Metaverses are more than just online communities where people may hang out. Users can produce content that is also enjoyed by other users.

2.2 Marketing in metaverse.

One is that top media appears to be on board. Even Cathy Hackl, a well-known digital futurist and metaverse strategist, started a column for Forbes. Additionally, there is a fund called the Metaverse Investment Fund Metaverse ATF that is already in existence (NYSE: META). All of them highlight how significant metaverses are becoming right now (Mileva, 2022). Besides, customers and users seem to be getting the point. Google searches for "metaverse" return 677,000 results. The hashtag #metaverse is also commonly used on Instagram, where it features in more than 60,000 posts, and yet is tweeted more than 500 times per hour on Twitter. As a result, digital marketers should beware and always stay up to date to keep up with the head-spinning speed of technological developments. This involves utilizing the potential of the metaverse. Marketers need to be mindful that the metaverse is more than just a passing phase; it appears to be here to stay and is vying to become the next great thing.

How should marketers change as the metaverse grows?

Initially, it's essential for marketers to consider how valuable millennials and Gen Z consumers are as a target market. These generations are also enthusiastic consumers of several types of metaverses, including VR and games like Roblox.

2.2.1 Traditional versus Metaverse marketing:

In a way that no video, advertisement, words, or image could, metaverse marketing enables businesses to design their world to reflect their brand. Customers can have an entirely immersive experience thanks to the individuality of each environment. Metaverse advertising provides a more immersive experience in comparison with traditional one (Cheng et al., 2022). People can utilize the metaverse, for instance, to view things in their homes in 3D and at an exact scale, such as IKEA's Place, which allows you to see the furniture inside a room. Traditional marketing does not provide opportunities to virtually sample things in a home setting. Physical limitations are imposed by the metaverse (Hetler, 2022).

Given that not everyone has access to the metaverse yet, businesses might appear innovative to consumers by utilizing this fact. The metaverse may be a means for businesses to distinguish and develop their advertising strategy because traditional marketing faces increased competition. The metaverse is riskier than traditional advertising because it is newer and results may be difficult to assess. Likewise, not all customers use them.

The decentralization of the metaverse is an intriguing feature, according to LaFleur. Contrary to Facebook, when businesses and individuals use a platform owned by another company, they have the opportunity to determine the environment they will see. Meanwhile, online platforms like YouTube, Facebook, or Instagram, as well as other advertising channels including magazines, radio, billboards, and banner ads, are examples of traditional advertising platforms that assess all material before it goes live (Hetler, 2022).

2.2.2 Metaverse implementation in Marketing:

It is essential to develop marketing experiences that tie to real-world experiences or replicate what your business already does in the real world because the metaverse is about offering users an experience (Mileva, 2022).

There are methods for marketers to embrace a future in the metaverse, whether they are promoting goods or services. Before entering the metaverse, organizations should create goals and be careful to experiment because the platforms are always changing. To analyze customer response and make the required adjustments, businesses should start small.

Businesses should think about using the metaverse to connect with their target market. Offer virtual things that are comparable to those offered in physical stores if increasing sales is the primary objective. For individuals to have them both online and physically, figure up a means to connect the two. But before using a metaverse platform, be sure to understand the audience (Hetler, 2022). The key to success in the metaverse is an immersive experience, marketers can provide virtual advertising services. As an illustration, the video game ad tech company Bidstack switched from running advertisements on actual outdoor billboards to executing them digitally.

However, there are options outside of virtual billboards. It is advisable to capitalize on the sensory and immersive character of metaverses by providing the same immersive

experience in marketing and advertising campaigns. Instead of merely posting conventional ads, provide interactive brand installations and events (Mileva, 2022).

A Lil Nas X performance on Roblox, visits to the Gucci Garden, and a virtual recreation of the Washington Heights neighborhood created as part of Warner Bros.' marketing of In the Heights are just a few examples of early adopters offering immersive experiences to their consumers. Recently, brands have discovered fresh sources of income by working with the Roblox metaverse and other metaverses.

Another key tip is to make collectibles available, people like to collect things, and the metaverse now offers a fresh way to start a new collection. Additionally, users can trade digital collectibles with one another. To verify ownership, Nike, for instance, is developing NFTs for digital products that are distinct and secured by blockchain technology. For instance, The Collector's Room is available in the Roblox Gucci Garden experience. Limited Gucci products are available for collection in the metaverse. Gucci earned 286,000,000 Robux from the game from the initial sales of the collector products (Mileva, 2022).

The next tip is interacting with current communities. Businesses shouldn't penetrate existing communities and try to sell their products to the members. Instead, think about the platform's design. They can naturally assist in carrying out a company's campaign if you interact with current members to create user-generated content such as videos, text, photographs, and audio (Hetler, 2022).

Encourage consumers to test out products. Consumers can view a 3D version of a product before purchasing it via virtual and augmented reality. For a virtual tour of the car, automakers like Porsche and Hyundai have set up viewing areas and events online. Customers don't need to leave their homes to explore a new product because customers can do things like using augmented reality to see furnishings in their homes or try on clothes. Creating live interactive events is also should be taken as a useful tip. When the pandemic hit, many events became virtual, but the metaverse may elevate them to a new level. These occasions are interactive and offer 3D alternatives. To feel less isolated, remote workers will also be physically present in the metaverse. The metaverse can be more adjustable and cost-effective, allowing for interactivity and collaboration. This is accomplished by visualizing and resolving issues in 3D as opposed to the 2D constraints of current virtual meetings.

Challenges in metaverse

For now, no one can be sure how the Metaverse will look in the future, but we can anticipate that it will need to overcome the following obstacles to become a fully functional virtual world:

When it comes to the real world, the issue of personal identification and representation is rather simple. However, while discussing virtual worlds or the Metaverse, one can query what constitutes a person's identity. And maybe most significantly, how to demonstrate your identity if a human impersonator or even a bot tries to imitate you. This is where a person's reputation can be crucial for both authentication and as evidence of the reliability and legitimacy of the entity one deals with. The ability to fake face characteristics, video, and voice is the key difficulty, thus new verification techniques will undoubtedly be created in the near future.

In the metaverse, maintaining data security and privacy continues to be difficult. New technologies need the use of more sophisticated security measures. To do this, new techniques for data privacy and protection must be developed. Personal verification, for instance, can ask users for more information, raising data privacy problems (Zhang et al., 2022). To guarantee the security of one's identity and assets in the virtual world, new techniques of personal data and privacy protection will need to be developed. That being said, personal verification may progress to the point where users are required to supply more personal information than is now required to authenticate their identity and verify that the security system is effective in protecting personal information.

Entering the Metaverse will raise the issue of law and jurisdiction, requiring nations to investigate the virtual legal spheres more. It will be critical to determine the criteria by which the issue of jurisdiction will be applied given the expanding virtual environment that users throughout the world have access to. Large user communities will inevitably congregate in the metaverse, creating a hub for connections and exchanges but also putting people at risk if there are no rules enforcing borders. Finding a jurisdiction and a set of laws that can guarantee the users of the virtual environment are safe and secure will be a real problem. Brands should proceed cautiously when navigating metaverses. A seamless connection is essential to prevent players from turning against the brand. Due to the novelty of the technology, marketers may still be struggling to establish their rightful position in the metaverse and may come across as being overly blunt in their

messaging. Make sure to carefully plan your placements so that they blend in with the metaverse and feel natural. Finally, because metaverses are available to everyone, brands must take better care to safeguard their reputation. The likelihood that your brand may be associated with dubious content increases with the amount of control people has in a metaverse. Additionally, there is a chance that people would disregard or vandalize your installations. This is why it's crucial to be flawless, thoughtful, and precise with your marketing methods so that users feel comfortable interacting with you in the virtual world.

2.2.3 Bright future of Metaverse:

What investors think of Metaverse

From an investment standpoint, Metaverse opens up a variety of new possibilities in the market for digital real estate, boosting the value of current IT companies that can successfully operate there (Facebook, Tencent, Microsoft, etc.). However, non-tech companies will also find opportunities in the Metaverse if they can capitalize on sales and marketing potential (Coca-Cola, influencer marketing firms, etc.) or the resource requirements of the infrastructure (Nvidia, Qualcomm, etc.). Future successful IPOs by new companies that are built from the ground up are possible (Decentraland, etc.). The value of various cryptocurrencies and the entire NFT market will likely increase as a result of Metaverse. Costs can be reduced, and companies can work more effectively as a result.

NFTs, blockchain technology, and cryptocurrencies all point to the Metaverse. Naturally, there are a lot more Metaverse investment options that aren't as obvious right now but will become more apparent as time goes on. There might be a separate digital stock market for the Metaverse. There will be a demand for Metaverse tales and investment opportunities from angel investors, venture capitalists, SPACs, funds, and retail investors, likely with high valuations and high potential returns. The most prevalent notion of the Metaverse is that it is a decentralized, open platform. Similar to the internet, which has many businesses online. To achieve this, the acquired goods (land, property, works of art), and money must be transferable between various surfaces. This is supported by blockchain and NFT technologies.

According to how things stand, businesses' marketing efforts will be elevated to a whole new level by entering our rooms and coming from a setting where relentless targeted advertising may be thrust into our faces in a way far more sophisticated than an Instagram story (which is already much more sophisticated than a TV commercial). Marketing and the creator economy are two of the new world's most intriguing and high-potential industries. Advertisers will have access to more data than ever before, and intelligent targeting will be elevated to entirely new heights. Data will become even more accurate and valuable. Brands will need to develop their digital twins and adapt to or set the new Metaverse trends. Influencers will need to consider developing their avatars and collaborating with brands in the Metaverse; some of them have already started.

The impact of the metaverse on influencer marketing

It is undeniable that the Metaverse will disrupt the social media landscape because it has the potential to completely alter how we live. Creators now have a completely new avenue for contact and communication with both their followers and other influencer peers thanks to the Metaverse. Sports influencers will have their fan base in the audience, food influencers can cook together, travel influencers can share experiences, and there are many more possibilities. It's a playground that, at this time, basically has no boundaries and allows all participants—whether they are influencers or businesses—to be trendsetters, innovators, and creative geniuses. Furthermore, are the metaverse influencers going to be made up of real people, or may they just be simulations?

The market continues to concentrate a lot on 2D NFT marketplaces, which are the newest and hottest way to exchange valuable items (and sometimes a whole lotta value). Post For Rent is on a mission to give creators a one-of-a-kind platform to exchange and sell their digital artwork, carrying on the virtual adventure. Today, the question isn't whether the Metaverse will exist or not; rather, it is whether businesses and content producers have a strategy for how to participate in the new internet era, or whether they will lose out on this as they did with the crypto boom.

Everybody desires a bit of it

Almost everyone wants to be present at the beginning of the Metaverse and be a pioneer. The world leader in the release of blockchain-based, distinctive, collectible content on Decentral is Coca-Cola. It was possible to participate in an NFT auction as part of an

online event and win items like friendship cards or sound players that mimic Coca-Cola can opening. Gucci advertised its existence in the Metaverse on the website Roblox and offered its digital bags for sale, each of which cost \$4,115 and whose owner was verified by NFT. We should point out that the bag was even more pricey than the real bag, which retails for \$3,400. Even though few women would presumably want an NFT bag for their birthday, this appears to be the situation in the present.

In seven minutes in February, RTFKT (artifact, which develops virtual objects and establishes ownership with NFTs), sold 600 digital shoes valued at \$3.1 million. Anyone who purchases a digital shoe can add it to an existing Instagram photo of themselves.

Fashion shows are also held online, and some ensembles fetch prices of more than \$130,000. At Decentraland, Sotheby's and Christie's have each established their digital headquarters. In addition, CNN sells its best moments in NFT format, while Lionel Messi debuted his NFTs on the "Messiverse." Their firm has a great opportunity to grow thanks to online adult entertainment. The gaming industry has already made the move to the virtual world thanks to billions of dollars coming into their businesses.

2.3 What are big brands doing with Metaverse, Metaverse in Marketing world?

Metaverse can do great things and big brands are making a lot of great out of it that should be studied well for catching up with innovative marketing fields.

Gucci:

As stated in the previous part, Gucci is one of the few brands that have embarked on dominating metaverse marketing (Fang, 2022). Gucci was a leader in the fashion sector and a pioneer in the field of digital innovation. It created its own "Good Game" environment, which included a digital sneaker gallery and garage, and it introduced the Gucci Arcade vintage gaming lounge in its official app. The company has never stopped uncovering the virtual space. One of the most stand-out virtual art installations by Gucci in Metaverse is the "Gucci Garden" as mentioned before, Gucci Garden is a distinct virtual space and is not a part of the Metaverse. Gucci, on the other hand, made a direct marketing effort into the Metaverse in 2022 when it bought land in the Sandbox (Fang, 2022). Players on the platform must use the SAND token that circulates in the Ethereum network

to purchase virtual goods since The Sandbox uses a cryptocurrency that is extremely relevant to the real-world economic system.

Gucci's innovations go beyond just understanding fashion aesthetics; they have a firm grasp on all global digital trends and the guts to take on international experiments and developments. Although the brand may not view the investigation directly aiming to increase profitability as a crucial component of a long-term marketing plan. The Metaverse has excellent promise, even though it has not yet reached a mature stage. Because of this, it is not a direct profit model but instead focuses more on creating an intangible brand culture and developing an emotional connection with customers as well as the potential ones.

Adidas:

Adidas is fully committed to the metaverse. Limited-edition items by Bored Ape Yacht Club, Gmoney, and Punks Comics are part of the NFT wearables collection, which launched last year and is available for purchase on "relevant NFT marketplaces." Adidas Capsule NFT Collection owners have the option of giving up their Capsule NFT and substituting one of the new wearables at random. In the future, owners of suitable partner collections and virtual wearables from Adidas will have access to a tool that allows them to dress their NFTs in Adidas wearables. As part of its drive to advance its "community-based, member-first, open metaverse approach," the company established a new product category for virtual gear. Each item of clothing is compatible with different virtual worlds and projects and was created specifically for virtual avatars. The company stated that this meant the Adidas line was capable of being responsive and adaptive to the constructed metaverse environments so the 'virtual Gear' was ready for all Web3's frontiers.

Nike:

The latest endeavor of Nike is a metaverse play called. Swoosh is a Web3-enabled portal where customers can purchase its virtual goods. It is fundamentally a platform, which makes sense given that commerce will continue to rule both the breathlessly anticipated future internet and the current one (Sengupta, 2021). For registered members, Swoosh will be an experimental digital area on the ".nike" domain. It's now in beta, and users can sign up to participate (Perry, 2022).

The platform's initial emphasis will be on fostering community, and it will give users "challenges" to gauge their preferences. The company's first virtual line of footwear, clothing and accessories will debut on Swoosh in January 2023 and be influenced by interactive voting and other processes. Following that, members will be able to acquire and exchange these digital-only goods; the platform will not employ cryptocurrency but rather cash (USD), albeit all transactions will be logged on the Polygon chain. Virtual apparel from brands is nothing new, but Nike hinted that Swoosh's community challenges would expand the next year to include competitions where participants may win the chance to co-design virtual Nike products with the brand's designers and receive a cut of the royalties. A virtual product marketplace can be seen by Nike as the obvious next step in its digital triumphs. Following the pandemic, the brand had significant increases in its online sales, and by March 2022, digital channels and applications had contributed more than a quarter of its total revenues, with digital sales growing strongly.

Nike is not just placing a bet on the future of virtual products; it is also banking on the viability of selling them in its brand-new environment as opposed to on popular, well-known platforms owned by Roblox and others. According to market analyst Benedict Evans, such a move involves a big risk, especially from a company like Nike. According to him, the market for virtual goods that don't fit into niches like Roblox or Fortnite is still in its early stages (Perry, 2022).

MC Donald's:

The word "metaverse" refers to "next-level" virtual platforms where users will engage in immersive, lasting interactions with one another and with companies like McDonald's. McDonald's is one of several international brands that believe it to be the future of marketing and customer service (Marr, 2022).

Nobody walks into a McDonald's intending to make a financial investment or purchase a piece of art. Therefore, when McDonald's decided to enter the metaverse, it wasn't only an effort to remain current or to market something completely new, but rather to continue marketing what currently works: real-life hamburgers, fries, and other culinary items. It's as easy as it sounds, but it's wonderful because the 66-year-old company is selling exactly what people want via the metaverse (Marr, 2022).

In a future where people spend their time online, McDonald's would not be a place they would physically go. However, that does not imply that McDonald's should pass up the

chance to provide food to those who are in need. To attract customers, McDonald's is utilizing the metaverse by enabling users to visit a McDonald's location there and place real food orders that will be delivered to their actual homes.

There is no doubt in saying that the corporation is giving its customers a very clear value for their money, even though the worth of a Big Mac may be up for debate. It will lessen friction and increase sales because consumers can obtain through the metaverse exactly what they would obtain from a physical McDonald's restaurant (Meisenzahl, 2022). After all, people are aware of the price of a burger and shake and are aware of what they will receive for their money when they purchase one. McDonald's foray into the metaverse is brilliant because it demonstrates that you can stay in your lane while venturing down new avenues. The metaverse is merely one more channel for companies to reach clients and close deals. Moreover, you do not need to create new products to be a part of it.

Coca-cola:

Coca-Cola announced the release of a limited edition Coca-Cola Zero Sugar Byte-branded metaverse drink this past April. Specifically, on April 4th, the company released this drink in limited quantities in some Latin American countries. Coca-Cola Zero Sugar Byte is now available in the US from May 2nd, establishing an "open door" between the real world and virtual reality (VR) through a drink pack of 2 compact cans. 12.5 oz. Before its release, The Coca-Cola Company's Oana Vlad, Senior Director of Global Strategy, described the beverage as "an original flavor inspired by the pleasure of the pixel, rooted in the experience that the game delivers." The gaming community has been enthusiastic as a result while testing out new flavored drinks from the virtual reality realm. Coca-Cola Zero Sugar Byte has a sweet taste and mild scent. When compared to regular Coca-Cola Zero, the color is a bit lighter. The product has a rather loud popping sound when the lid is opened, compared to the sound of 3 cans of Coca-Cola soda. The taste of Coca-Cola Zero may be offensive to some people, but the rest love this drink and the games offered by Coca-Cola (@appROI).

Why is Coca-Cola launching a pixel-flavored drink?

This is not too new for Coca-Cola because the brand itself has a long association with gaming. In February, the brand released Starlight, a limited edition that allows customers to attend Ava Max's AR concert. Last year, Coca-Cola introduced its first NFT collection,

followed by four other Coca-Cola NFT sets. The surreal and virtual worlds are a great hub for brands to draw audiences to their products. Sold as the first drink from the metaverse, Coca-Cola Zero Sugar Byte has taken over the metaverse world. The company also said, "Coca-Cola Zero Sugar Byte will bring the taste of pixel to life in just a limited edition beverage that transcends the digital and physical worlds. Since the Coca-Cola brand has a long history of being associated with gaming, this is not particularly new for them. In February, the brand released Starlight, a limited edition that allows customers to attend Ava Max's AR concert. Last year, Coca-Cola introduced its first NFT collection, followed by four other Cocacola NFT sets. The surreal and virtual worlds are a great hub for brands to draw audiences to their products. Sold as the first drink from the metaverse, Coca-Cola Zero Sugar Byte has taken over the metaverse world. The company also said, "Coca-Cola Zero Sugar Byte will bring the taste of pixel to life in just a limited edition beverage that transcends the digital and physical worlds.

Play the Virtual Reality Game from Cocacola.

Coca-Cola has introduced a new set of games for users who have purchased the Zero Sugar Byte pack. By breaking into Fortnite, users can access the AR game by scanning a code on Coca-Cola's creative website. Cocacola described its AR game as follows, "This game tells the story of BYTE, an 8-bit pixel that was left behind after Cocacola Byte entered the metaverse. Using your finger to hold the down arrow, the player instructs BYTE to 'jump' up a spiral staircase so that a single pixel can reattach to the Coca-Cola logo. Player completion times will show up in virtual reality cyber rankings, and can be shared across social media channels." This has helped create campaigns that are outstanding, interesting, and attract users' attention. Above all, AR Marketing campaigns also show the level of trend updates, constantly evolving to meet new needs in modern life.

Samsung:

Recently, Samsung and Decentraland joined together to launch a digital version of its flagship 837 physical stores. One of Decentral's largest branding initiatives had ever been done. Three parts make up the virtual world experience: the Connectivity Theater, which featured tales from Samsung's stage at CES 2022. The Customization Stage for visitors as part of the Sustainability Forest, a journey through millions of trees honoring the brand's sustainable initiatives.

Samsung collaborated with online influencers Miquela as well as Shudu to launch the new Samsung Galaxy Z Flip product as well as the Samsung Galaxy Series through campaigns on social media. This newly launched smartphone is one of the first flip phones with a fingerprint sensor currently available on the market, which made Samsung's partnership with Shudu—the first virtual superstar in the world—even more logical (Perry, 2022). When Samsung decided to use virtual influencers as brand ambassadors, it was able to fully utilize influencer marketing and the metaverse. There are countless influencers on social media sites, and a campaign may only stand out if it picks the perfect one. Samsung demonstrated creativity and authenticity in the digital realm by deciding on Miquela and Shudu.

Hyundai:

Hyundai released the full version of Hyundai Mobility Adventure in October 2021 on Roblox, a website with 43.2 million daily visitors. Their initiatives blur the distinction between marketing and gaming, enticing players to interact with their brand through gameplay. Users can play games, role play, race automobiles, drive Hyundai cars, and engage with other users in this immersive world's five unique "theme parks." Users can interact with existing and upcoming Hyundai technology through Hyundai Mobility Adventure. This enables customers to use the brand's newest technologies before they become accessible for in-person use (Ake, 2022).

The areas in Hyundai Mobility Adventure are designed according to 5 themes:

Festival Square: A central place for players to return from their explorations, where they can participate in carnivals, celebrations, and car displays. The Mobile City of the Future: A state-of-the-art metropolis where players can experience future mobility solutions and Hyundai Motor's hydrogen fuel cell technology. Eco-Forest (powered by IONIQ - Hyundai's electric vehicle brand): The entertainment area offers a minimalist lifestyle with eco-friendly mobility technologies and fairy tales. Racing Park (powered by N-Hyundai's high-performance car brand): Where players can experience the most advanced racing technology and motorsports through N cars. Smart Technology Campus: A hub for future technology research, where users can practice the experiments of engineers and designers in a sophisticated setting (Linh Ha, 2021)

Participants are free to move between the five zones above, try out Hyundai Motor products and future mobility solutions, and role-play to complete a variety of tasks. As the

first auto brand to approach the metaverse platform, Hyundai believes that Hyundai Mobility Adventure will build long-term relationships with customers, especially young, tech-savvy, and eager to explore the virtual world beyond the experience.

Vans:

At the same time as joining Hyundai's metaverse, Vans also launched Vans World - a 3D space for users to practice skateboarding techniques with friends at brand-specific locations such as the House of Vans store or the world-famous Vans Off The Wall Skatepark in California, and try and buy exclusive Vans equipment. With this novel experience, Vans is the first brand to combine skateboarding, fashion, and community on the metaverse.

Nick Street, Vans Global Vice President of Integrated Marketing, said: "Vans has been supporting the development of skate culture - an innovative form associated with personal expression for more than 50 years. Vans World on Roblox is part of our effort to foster creative expression in the digital age and to bridge the gap between sports and fashion in the virtual and actual worlds in a welcoming, inclusive manner. Vans is a champion of youth culture and a global icon. We're thrilled to provide this experience to Roblox's countless millions of Vans fans (Linh Ha, 2021). In addition, Vans partnered with community developers Roblox The Gang Stockholm to create virtual skate shoes for Vans World players. In particular, the enhanced physical layer will help bring the feeling of skating like real life. This shows the leading technological innovation of the Roblox platform.

The season's Brands marketing in Metaverse?

In the metaverse, players have individual agency, the universe is self-contained and completely functional, it is always active, and user-generated content is present. Although other businesses are developing metaverses, the gaming sector is the first to fully recognize and use its possibilities. And the companies that recognize the promise of metaverses first will reap the greatest rewards. Marketers are swarming to the metaverse for a variety of reasons. It's new, and there are now quicker connections to handle expanding environments. But maybe the most crucial factor is that metaverses enable marketers to reach and engage Gen X and Millennials in new ways that are relevant to their products and technologies. Moreover, the brands are getting more and more

engagement thus it is obvious that the marketing strategy is working (Faridani, 2022).

Besides, there are some great points making metaverse potential fun for brands to get in.

Promote digital products and make money from them. Brands can market digital goods

that consumers can utilize in their virtual worlds in the metaverse. For instance, a clothing

company might sell virtual clothing that a client can wear in their virtual world, or a

gaming firm might sell virtual game things that a customer can use in their virtual reality.

The reach of the brand can be increased by a consumer's virtual purchase encouraging

them to pick up any things outside the metaverse in the real world.

Conceive brand experiences. Brands can design interactive experiences in the metaverse

that let customers interact with them in novel ways. For instance, a fashion company

could produce a virtual runway show where consumers may try on clothing and buy it in

the metaverse. Before making a vacation reservation, a consumer can explore an area and

learn about the local culture by taking a virtual tour created by a travel company. This

gives businesses a chance to connect with clients they might not have otherwise and to

bring people from all over the world together in a virtual setting.

Create a loyal customer base: Brands have the chance to increase consumer loyalty by

establishing a venue that people will visit often in the metaverse. In the metaverse,

businesses can give clients access to special events, early access to new products, or

exclusive bargains. This assists brands in building a community of consumers who are

invested in the brand and more likely to buy the products in the future.

More effective product development: Brands can use the metaverse to test out new

products before making them accessible to the general public. In the metaverse,

businesses can build a prototype of a new product and let users test it out before it is made

available to the public. Before a product is published, this can help firms obtain customer

input and make necessary revisions. In the long run, this can save the brand both time and

money. As a result, the final product that is supplied to the customer is better suited to

meet their demands than it would have been if the brand had relied on conventional

product development techniques.

CHAPTER III: RESEARCH METHODOLOGY

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This chapter will outline the research plan, including a description of data collection and analysis, as well as the methodology used for the study. It will also introduce several ideas and explain why the methodology was chosen.

3.1. Research philosophy: Positivism

Saunders, M. et al. (2009) presented conceptualizations of research philosophy in their article "Research methods for business students," claiming that this is the foundation upon which researchers build their approach and strategy to conduct the research as well as guide their interpretation of the results. Or to put it another way, research philosophy is a collection of principles that guide the gathering, evaluation, and application of knowledge. It is essential to have a coherent philosophical stance since it guides the methodological approach, data collection, analysis, and result interpretation in research (Collis & Hussey, 2014). Though scholars have been forming their philosophical assumptions from a variety of perspectives, Saunders, M. et al. (2019) indicated that there are four common philosophies employed in interpreting the sources and knowledge about the world: Positivism, Interpretivism, Realism, and Pragmatism.

In the fields of natural and social science, where initiatives concentrate on studying the interactions of social actors, positivism is frequently observed. The selection of the positivism paradigm frequently involves gathering facts in support of a put-forward theory (Saunders et al., 2009). Future research will benefit from the findings of the investigation and validation of the hypothesis. To test a hypothesis, an organized technique and specialized research plan are typically needed. The observable outcomes also need to be highly quantifiable and measurable, which frequently calls for the use of a quantitative method and statistical data analysis. Peer reviews of the literature primarily aim to present the causal chain, as well as any underlying ideas, which are then utilized to support or refute the findings. Interpretivism is a philosophical stance and research methodology that examines social occurrences in light of the particular value system of the society or culture in which they occur. This research approach is qualitative. Qualitative research uses words rather than numbers to express data. Contrarily, quantitative research is grounded in numerical data. While the latter is the primary research methodology in the natural sciences, the former is typically used in the humanities and social sciences (Saunders et al., 2009). Nevertheless, to get reliable

results, all fields increasingly combine qualitative and quantitative data including focus groups, participant observations, and ethnographic studies. Science is considered to be another aspect of realism. Similar to positivism, realism emphasizes the researcher's independent justification of the objective phenomenon (Saunders et al., 2009). Its main tenet is to explore the nature of reality and the truth underlying the phenomenon that is being observed. Their opposing perspectives on the function of the researcher are one of the main divisions between positivism and interpretivism. Positivists believe that in order to avoid bias and increase dependability, the researcher should maintain a neutral and impartial posture toward the research subject. Interpretivism, on the other hand, contends that because the researcher and the study topic are a part of the same social reality, they cannot be fully separated from one another. To influence the research process, they emphasize the significance of reflexivity, or self-awareness of the researcher's preconceptions and attitudes.

The way that positivism and interpretivism understand the nature of social reality differs significantly from one another. Positivists believe that social reality can be studied and quantified using unbiased means and that it exists independently of human cognition. Interpretivists, on the other hand, contend that social reality is arbitrary and is created via human interaction and interpretation. As a result, they underline how crucial context and meaning are for comprehending social occurrences.

The research design and methods will be significantly impacted by the decision between positivism and interpretivism. To test hypotheses and provide generalizable information, positivists emphasize the use of standardized and objective measurements, such as questionnaires and statistical analysis. In contrast, interpretivists investigate the variety and complexity of the human experience using open-ended and adaptable methodologies like participant observation and interviews. Additionally, they stress how crucial context and interpretation are when analyzing qualitative data. The problem-focused methodology of pragmatic research has replaced the conventional positivist and interpretivist paradigms in social science research. The pragmatic approach emphasizes the practical application of knowledge and focuses on real-world outcomes to close the gap between theory and practice. This is accomplished through adhering to actual evidence, utilizing a variety of techniques and viewpoints, and implementing reflective and adaptable research techniques. Several distinctive characteristics define the

pragmatic method, including its emphasis on the value of experimentation and feedback, the inclusion of social justice and ethical considerations in research, and an openness to collaboration and multidisciplinary approaches. Consequently, pragmatism research methodology provides a practical and context-sensitive strategy for studying social science research that prioritizes the practical application of knowledge in a real-world situation. This study illustrates the customers' behaviors toward marketing in Metaverse and this is going to explain the question If the metaverse becomes a potentially new element for marketing and customer service, will it become a stimulus for customer experience and new trends in the future? What marketing can do to maximize the performance applying Metaverse? marketing trends forecast? This research paper should be the source for future studies as well as for marketers to generate the best innovative marketing campaigns. The research concentrates on the conversations that have been made online through some popular social networks, and the trends which are becoming more and more popular in the marketing industry. Then illustrating the data using a sentiment analysis tool to see if the users are changing their behaviors toward the advertising and campaigns in the Metaverse. Due to the complexity of this idea and the possibility that it may entail several data collecting and analysis from social network sites, positivism as a research philosophy will be used to gain a deep understanding of future trends and to find the answers to those questions mentioned above.

3.2 Research Strategy:

My research approach will combine hashtag analysis from social media with data collecting to show the potential future of the Metaverse in marketing. To examine our data, we adopted a mixed-methods strategy. We employed social network analysis (SNA) to comprehend how discursive conflicts developed (Wasserman & Faust, 1994). Finding pertinent hashtags relating to the Metaverse and marketing will be the first stage in my investigation. On well-known social media sites like Twitter, Instagram, and Facebook, this will entail employing social media analytics tools to look for and monitor hashtags associated with the metaverse and marketing.

Once I have chosen the relevant hashtags, I will use social media monitoring tools to learn more about how and by whom these hashtags are being used. The specifics of this information will include things like how frequently each hashtag is used, the users'

whereabouts, the kinds of content they publish, and their feelings when they do so. To examine the data I have obtained, I will use both statistical and qualitative methods. To uncover recurring themes and trends, I might use content analysis to read through the text of posts that contain pertinent hashtags. In order to ascertain the general attitude and mood of the posts, I will also apply sentiment analysis.

I will utilize a variety of analytical techniques, including data visualization, network analysis, and regression analysis, to conclude my research. In order to build a narrative that depicts the potential future of the Metaverse in marketing, I will look for patterns and trends in the data that has been gathered. The overall goal of my study method is to provide insights into the potential future of the Metaverse in Marketing using a combination of quantitative and qualitative examination of social media data. This strategy will contribute to a more complex understanding of the Metaverse as a driver of future customer experiences and new trends.

3.3 Opinion mining method:

Opinion mining sometimes referred to as sentiment analysis, is the process of extracting and analyzing people's opinions, attitudes, and emotions from textual data using machine learning and natural language processing techniques (Wasserman, S., & Faust, K. 1994). In the current digital era, opinion mining has grown in significance as social media and online reviews have proliferated as means of expressing

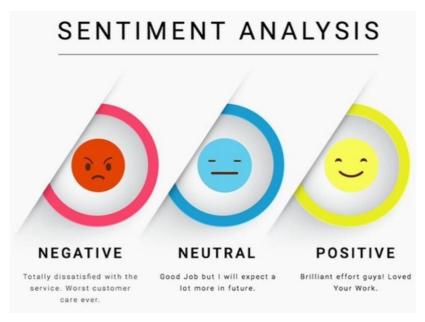


Figure 2 Sentiment Analysis Method (2022)

Due to the increased interest in e-commerce, which is also a significant source for expressing and assessing ideas, sentiments, assessments, and reviews are becoming more and more obvious (Kumar Ravi, Vadlamani Ravi, 2015). Today's internet users mostly rely on reviews left by previous buyers, and producers and service providers in turn use consumer feedback to raise the caliber and standards of their goods and offerings. For instance, reviews posted on e-commerce websites like Amazon, IMDb, eOpinions.com, etc., might affect a customer's decision to purchase a good or sign up for a service (Kumar Ravi, Vadlamani Ravi, 2015).

Online and social media are quickly replacing offline media in developing nations, which enables ordinary people to participate in political discourse and gives them the opportunity to express their unique viewpoints on global issues in an interactive way. In the form of written posts, news, photographs, and videos, online media offers improved ways to receive instant responses and feedback on many World issues and entities. As a result, it can be used to analyze public opinion in order to understand consumer behavior, market trends, and societal trends. Twitter manages 500 million tweets daily and has 255 million monthly active users. As a result, it is a useful tool for gathering distinct viewpoints that have been published by individuals from other societies for a variety of goals, including raising the caliber of goods and services, predicting customer demand and preferences, etc.

Product reviews, blogs, and discussion forums are just a few examples of how social networking sites (SNS) and online media are used to express and share public experiences. These media are effective at educating the public about a variety of issues because they together contain highly unstructured data combining text, photos, animations, and videos. Numerous industries, including market research, brand management, customer service, and political analysis, use opinion mining. Businesses may improve their goods and services and raise consumer happiness by studying customer sentiment. By using opinion mining, political analysts can track public perceptions of political issues and candidates and create focused communication plans. Sentiment analysis can provide great insight into public perceptions and ideas in general, but it is essential to be aware of its restrictions and ethical considerations while using it.

Data collecting and analysis:

A dataset of text data is needed to do a content analysis or sentiment analysis, and this dataset can be found online or on social media sites. Preprocessing the text data after acquiring the dataset is crucial in order to eliminate extraneous information such as stop words, punctuation, or special characters. The text can be categorized into themes or categories using coding for content analysis. This can be carried out manually or automatically utilizing software tools. After the data has been coded, it can be examined using several methods, including frequency counts, grouping, and co-occurrence analysis. Software tools can be used to categorize text into positive, negative, or neutral categories for sentiment analysis. Lexicon-based techniques or machine learning algorithms can be used for this. Once the data has been categorized, it can be analyzed using a variety of techniques, including sentiment ratings, opinion mining, and emotion analysis.

The approach selected will ultimately rely on the study question and the type of data gathered. It is crucial to thoroughly weigh the advantages and disadvantages of each method before selecting the one that will best serve your research objectives. The data was collected mainly using the website Brand24.com to analyze all the information including the number of mentions, the source type, the languages that have been used, the sentiment, the active sites, and the context of the discussion. The data was collected from the hashtags that can showcase the potential of the Metaverse for customer experience and new trends in the future including:

#Metaverse, #VirtualWorld, #ImmersiveExperience, #CustomerExperience, #FutureTrends, #VirtualReality, #AugmentedReality, #XR, #MarketingInMetaverse, #InnovationInMarketing, #BrandExperience, #DigitalTransformation, #NewFrontier, #NextGeneration, #TechnologyInnovation, #CustomerEngagement,

#InteractiveMarketing, #EmergingTechnologies, #MetaverseMarketing, #BrandAdvocacy.
Those hashtags mentioned above can help researchers reach a wider audience and also create visibility for the content related to the potential of the Metaverse for customer experience and new trends.

Consequently, in this paper, the data will examine the opinions of both customers (users) who experience Metaverse and marketers who use Metaverse to generate customer experience.

CHAPTER IV: STUDY FINDINGS AND DISCUSSIONS

4.1. Study Findings

In this section, the data collected from social media sites will be demonstrated to answer the main questions mentioned above.

4.1.1. Hashtag #marketingmetaverse

This study employs opinion mining methodology to extract and analyze social media data on the topic of #marketingmetaverse. Opinion mining also referred to as sentiment

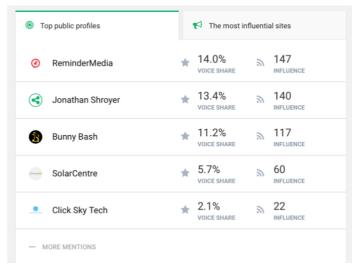


Figure 3: Top Public Profiles (2023)

analysis, is a natural language processing and machine learning technique that detects and evaluates the polarity of text data, categorizing it as positive, negative, or neutral. Noticed that most accounts posting content using the hashtag are Marketing agent accounts, business accounts, brand accounts Tech agents, or users working in the marketing and technology industry. As figure 3 below, the top public profiles are ReminderMedia, Jonathan Shroyer, Bunny Bash, SolarCenter, and Click Sky Tech. Those accounts belong to the marketing industry and posted the video on Youtube to inspire marketing in the Metaverse. Besides, youtube site allows users to make money from the video (depending on the number of views and the time viewers stay on the page) this makes content creators spend more time digging into the trends at the current time to generate the best result, and those influencers must know the trend that viewers would watch the most.

The current study gathered a total of 729 mentions of the hashtag #marketingmetaverse in one month from January 1, 2023, to the present from a variety of social media platforms, including LinkedIn, YouTube, and Anchor.fm. The sentiment of the data was then examined, and the results show that positive mentions outnumbered negative mentions by a margin of 4 to 1. This finding implies that the social media community has reacted favorably to the issue of the #marketingmetaverse.

The volume of talks on the subject is represented by the total number of mentions (729), which shows a comparatively high degree of interest and participation in the social media community. The 155 positive remarks in a total show that the general attitude toward the subject is good. On the other hand, a tiny portion of negative mentions with only 4 in total, reveals that negative sentiment toward the topic is minimal

The proportion of favorable mentions is crucial since it suggests that social media users

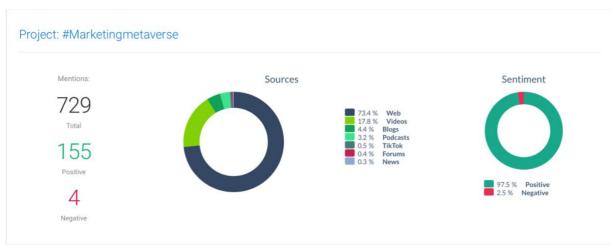


Figure 4 #Marketingmetaverse_Sources and Sentiment (2023)

may be very interested and engaged. In the context of the #marketingmetaverse, this knowledge is helpful for companies and marketers looking to make use of social media platforms to promote their brands, goods, or services.

Additionally, the fact that only 4 mentions were classified as unfavorable suggests that the subject is not widely criticized or unfavorable. This shows that social media users generally find #marketingmetaverse to be a non-controversial and well-liked topic. The study also found that LinkedIn, YouTube, and Anchor.fm were the most active websites in terms of mentions. The most popular content types on social networking platforms in terms of activity are blogs, videos, and websites. These findings suggest that video and blog content are effective mediums for engagement with audiences on social media, particularly in the context of #marketingmetaverse. On the other hand, the app Brand24

also gave the statistic of 594 non-social mentions, 135 social mentions, and 134 videos including tiktok as below.

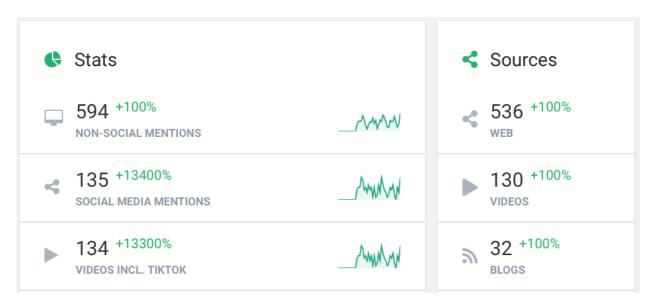


Figure 5: Statistics mentions and sources (2023)

When a lot of individuals use the hashtag #marketingmetaverse on LinkedIn, it shows that this social media site's online community is quite active and engaged in discussions about the subject. Businesses and marketers looking to engage with industry experts or focus their marketing efforts on this audience will find this information to be useful. Given that LinkedIn is a professional networking site, the prevalence of references there suggests that discussions about the #marketingmetaverse are probably going to be centered on news, insights, and professional development linked to the industry. This data can help organizations and marketers decide what kinds of material to create and distribute to reach this population. In addition, the fact that LinkedIn is one of the largest websites shows that its members may be more knowledgeable about their sector and interested in the subject than those who use other social networking platforms. This knowledge could help develop content and marketing tactics for a more niche audience. Generally speaking, the prevalence of mentions on LinkedIn offers insightful information about the tastes and actions of social media users who are interested in the #marketingmetaverse issue. Businesses and marketers can use this information to adjust their marketing initiatives to this audience's needs in order to maximize engagement and effect. One interesting result of the data collection is the frequency with which the hashtag #marketingmetaverse is mentioned on YouTube. It suggests that there is a lot of interest

in and involvement with the subject among users of the video-sharing site, which can offer insightful information for companies and marketers trying to market to and engage with this audience.

The debates and discussions surrounding #marketingmetaverse on YouTube are probably oriented around video content, such as tutorials, interviews, and other types of visual media, as the platform is predominantly devoted to video content. This data can offer companies and marketers insightful data on the kinds of material that resonate with this demographic, which can guide content strategy and marketing initiatives. In addition, the fact that YouTube is one of the highest-traffic sites indicates that users on this platform might favor visual material and engage with video media more than users on other social media platforms. This information can help advertisers better target this group and provide content that is tailored for optimum interaction.

Additionally, the frequency with which the hashtag #marketingmetaverse is mentioned on YouTube suggests that this social media site is a useful channel for companies and marketers trying to connect with a visually-inclined audience interested in the subject. Businesses and marketers may design content and promotional campaigns that are targeted for maximum effect and engagement by analyzing the behavior and preferences of YouTube users.

The report also mentions some of the contexts of the discussion including:

"leader power change CUSTOMET podcast pro42le improve business institute macdonald follow leadership bloomreach design post youtube speaker ecommerce comes automation payment great customerservice cybersecurity retail month relation thing thank training subscribe operations drive people quality sign customerexperience bloomreachdiscovery teach director sale make future cpaas add report marketing digital research entrepreneur emailmarkete transformation follower mba product author service Laurier com technology capgemini blockchain help platform digitaltransformation innovation topic saas software goodmorning provide experience Microsoft linkedin virtual year omail bpo view price team comment designer arti42cialintelligence solution easy good management customerjourney new strategy manager security yosefraz book think let explore scale success"

With bigger word size indicates the main topic and is more frequently mentioned. The overall picture from these texts gives the idea of changing customer experience and customer journey when the brands use the Metaverse for their strategies. It would change also the way to run digital marketing in the future. Furthermore, the data analysis provides the numbers of reach from social media are 1205 while that of nonsocial media

is about 6,700 times more than social media reach meaning users prefer to reach the related content through non-social media and more trustworthy sources.

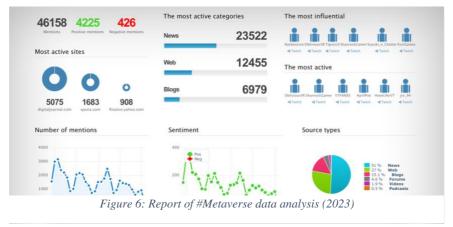
The use of opinion mining methodology enabled a deeper and more nuanced analysis of social media data on the topic of #marketingmetaverse. It enabled the identification of both the sentiment and the sites that generated the highest level of activity around the topic. This data has practical applications for businesses and marketers who are seeking to capitalize on the positive sentiment surrounding #marketingmetaverse and to leverage social media platforms to reach a wider audience.

4.1.2 #metaverse with keywords customer experience, immersive experience, and future trends.

The data collection process for the hashtag #metaverse involved conducting a thorough search of various social media sites such as Twitter, Youtube, and LinkedIn as well as online blogs, news, and websites to retrieve data related to the topic. The data collected consisted of user-generated content that contained the hashtag #metaverse, which included posts, comments, and other forms of user interactions.

The data gathered showed several significant metaverse-related tendencies. The growing popularity of immersive experiences—a crucial component of the metaverse—was the first pattern shown by the data. According to the research, users are actively looking for immersive experiences that let them interact with the information more deeply. This development offers the potential for brands to provide memorable experiences for this audience and is crucial for companies planning to interact with customers in the metaverse.

The significance of the customer experience is the second trend that can be seen in the data. According to the statistics, consumers place a high value on the customer experience



and are eager to interact with businesses that provide uniquely designed experiences that meet their demands. This trend shows the significance of offering a customer-centric experience to develop trust and loyalty, which offers useful insights for organizations and marketers aiming to establish a strong presence in the metaverse.

There have been 46,158 references to the subject at hand according to the tool's report for the most recent month. A sizeable fraction of these mentions, 23,522 mentions, or 51%, are attributable to the News. Webs were the second-most active category, with 12,455 mentions, or 27% of all mentions. In comparison, blogs accounted for 15.1% of all mentions with 6,979 mentions. These percentages provide crucial context for understanding the relative contributions of each category in the discussion on the subject and can help further analysis and decision-making process. As shown in the figure above, the most mentions are from the website digitaljournal.com, this is one of the most international news websites providing a range of topics such as business, technology, entertainment, environments as well as politics. The website offers its viewers up-to-date news and analysis of current events all around the world. Considered a trustworthy website, DigitalJournal.com employs a strong group of journalists and contributors who accurately provide reliable news and information to its readers. The fact that in the past month, this website has mentioned 5,075 hashtags with related keywords in its contents indicated that the news and the trend around the world embracing the #metaverse topic. While in the second most active website position is Quora.com, the site famous for the question-and-answer site where users come to ask questions that they find hard to find online. The questions are normally asked on a wide range of topics and the responders normally are experts working in the field of why it has become one of the most popular online communities of knowledge seekers and shares. The number of times #metaverse is mentioned on Quora indicates the popularity and engagement of a particular topic or conversation on the platform. That means the hashtag related to a current event or a trending topic is mentioned frequently on Quora, it may suggest that users are interested in discussing and learning more about that topic. The level of reputation of those two websites has made the hashtag #Metaverse and the related contents become hot trends to discuss on the internet.

Furthermore, there are significant numbers of non-social mentions accounting for 45,213 and 389 million nonsocial media reach contrary to 945 social media mentions and 1.5



Figure 7: Data analysis result (2023)

million social media reach. Those numbers indicate that people prefer to discuss and read information from nonsocial media sites such as websites, online newspapers, or blogs. Additionally, of those 45,213 mentions, there are 10,181 user-generated content UGC (the contents including text, image, video, and voice created by individual users, not by brands or any public parties) it could mean there are large numbers of users on those websites are interested in the topic related to the #metaverse and keywords: customer experience, immersive experience, and future trend.

The result from the tool after analyzing the data also provides a context for discussion including:

"blockchain web3 allow launch improve application opportunity people deliver include use change continue marketing global take current nft nfts focus increase overall company way intelligence market reality time value trend datum user look process crypto enhance virtual driver game offer tech augmented platform invest impact work share world report provide project growth base build analysis experience industry brand design research bank consumer announce live lead year service create gaming real model Customer come drive solution future new well space key say good read business want big need digital meta arti45cial long development technology challenge develop play help product forecast size".

With bigger word size indicates the main topic and is often mentioned. The general discussion is about blockchain, web3, marketing, market, gaming, crypto, customer experience, future trend, customer service, and technology development.

Keyhole:

To illustrate the influential level of hashtags and keywords, another tool has been used in this paper, Keyhole is one of the most used tools for marketers to generate the effect of the hashtags and campaigns as well. The data analysis is conducted for the past 2 weeks to get the fresh data and the trend in real-time. 901 unique users had posted using the relevant hashtag with about 1,204 posts. The posts reached the highest engagement on

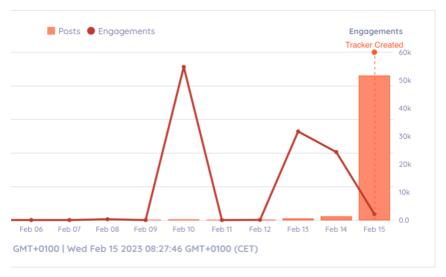


Figure 8: Posts and Engagements by Keyhole (2023)

the 10th of Feb, 2023 with 54,755 on 2 posts meanings there are a lot of users attracted to the contents of the posts. Besides, Keyhole analyzed the sentiment from the posts and



Figure 9: Sentiment analysis by Keyhole (2023)

keywords in the past two weeks with 51% positive from 633 posts, 558 accounts for 45% neutral posts, and 4% negative from 49 posts. As we can see the majority of posts use positive wording which means the content includes positive words or keywords, while the second highest group of posts stays neutral means the posts use a neutral tone of voice and may become critical. On the other hand, there is only a small proportion with negative sentiment means that there are only a small number of posts referring to the hashtag and related topics with negative opinions and attitudes. These posts are mainly from the American continent: USA, Canada, Mexico, Brazil, and some the countries such as China, India, and Australia, these countries are the top innovative countries in the world in terms of technology and the level of development. From both Keyhole and Brand24 (opinion mining tool) the results are quite similar with a greater number of positive posts and very small numbers of negative posts, while neutral accounts for quite a large number of proportions. As a result, most of the posts generate a strong feeling or attitude of positivity toward Metaverse, it provides insight into the level of engagement and interest in the topic and the topic is well-received among the audience.

4.2 Implication and discussions.

The findings shall be analyzed and discussed in accordance with the theories and the current situations of using the Metaverse presented above to respond to the questions of the future implication of Metaverse in marketing and generating customer experience through the platform.

4.2.1 The potential of Metaverse in an application for digital marketing.

Most social media and internet users try to avoid as much as possible engaging with digital marketing advertisements (Barreto, 2013), they normally deploy adblockers or pay the premium service for websites or apps to avoid online advertisements (Chen & Liu, 2022). This is the greatest barrier and difficulty for a marketer to engage with their target customers, thus, marketers always have to find new and novel ways to communicate and engage with their customers. Especially for digital marketers, without the occurrence of the Metaverse, the only ways for them to promote the products and brands are through social media sites, websites and emails. Now, as the newborn of the great platform that

can replicate the real-world experience in the digital world, the Metaverse opens a whole new world for marketers to promote, interact and sell their products to their customers without the barriers of customers trying to avoid the advertisements. The findings indicate that most of the posts related to the Metaverse and immersive experience with positive and neutral sentiment are created by individual users meaning customers are excited to experience this platform, the more users entering the platform the more potential the platform become a good place for marketers and brands to look for their target groups. Besides, there are a variety of functions the Metaverse can provide for firms not only with an immersive experience for users that interact inside the platform but also engagement in exciting content using AR and VR tools. Brands can build their product placements, get the membership fees from the platform and also monetize by providing NFT as the case studies of Nike, and Gucci stated above.

On the other hand, Metaverse offers multiple digital experiences which digital marketing can not provide rather than just targeting the consumer's touchpoints (Hollensen et al.,2022). Digital marketers are free to position their products with immense opportunities provided by the Metaverse. Instead of spending hours and hours on social media sites such as Twitter, Facebook, Instagram, Whatsapp, and Linkedin, individual users will potentially spend much of their spare time on Metaverse for not only personal but also professional purposes (Hollensen et al.,2022). Consequently, brands are rather spending their time and effort on the Metaverse platform to promote their offerings than on traditional digital sites. Eventually, Metaverse will become the common platforms where users can find everything not only the pieces of information and written knowledge but also the good and mirror experience as in the real world. It is no doubt that Metaverse applications could provide organizations the chance to extend their real-world positioning and also reposition their brands in new platforms and new environments (Rauschnabel et al.,2019).

Digital billboards are one form of metaverse-based marketing that will display personalized product adverts to various avatars based on their prior digital footprints and orientations. With XR technology, the metaverse platform would let businesses offer interesting product and service trails. For instance, anyone purchasing a sedan car can test drive one on the company's metaverse platform, and those purchasing a guitar can do the same on the 3-D platform. Similarly, anyone interested in purchasing a new

apartment in a township in Mumbai from their place of employment in Singapore can travel to that township in the metaverse environment and experience the entire township, including the property they intend to purchase. The company can carry out avatar-based marketing where an influencer can be an avatar endorsing the brand. Depending on their prior browsing, clicking, and gaming behavior, each user on the metaverse platform would see a unique influencer avatar. A new tribe of avatar-based influencers who were uncomfortable revealing their identities would also be infused by the metaverse. This will make it easier to find digitally aware talent that would not have otherwise participated in influencer marketing initiatives (Miao et al., 2022). Therefore, consumer engagement and conversion rates inside a metaverse environment are anticipated to rise with a lower cost per client acquired than it does in other conventional promotional mediums.

4.2.2 The potential opportunities for content creators.

Metaverse is and will be considered one of the most excellent platforms for people who work as content creators with the purpose of monetizing their digital products and services (Kim, 2021). Web 2.0 display advertising is one way YouTube content producers monetize their videos. Due to the diversity of content producers, the metaverse platform would grow to include more creative works. Selling to the intended clients on Web 3.0 metaverse platforms enables content creators in gaming, NFT, entertainment, etc. industries to monetize their works. To use these methods for content creation within metaverse platforms, content creators will need to be familiar with XR technology. The metaverse will offer revenue-based rewards to independent content producers in exchange for bringing them to its platform. It has been observed that there are more offers across domains, such as Android and iOS, the more content developers there are affiliated with a platform. Similar will apply to the Metaverse platform.

4.2.3 What is the future of the Metaverse?

Over \$120 billion had been invested in the construction of metaverse infrastructure and technology in the first half of 2022, as investors continued to pour money into the platform's development at an impressive rate. Big-name businesses are moving swiftly to join the growing popularity and be among the first to use the platform for promotional

purposes. The metaverse is not popular with everyone; many people are completely against it. Though sentiments of this sort will probably evolve as the platform achieves more traction and acceptance, there is not so difficult to imagine a world in which everyone is making the most of the Metaverse. Although the metaverse offers a new kind of platform, existing marketing techniques will not be replaced anytime soon, at least not anytime soon. Some businesses will profit from what the metaverse has to offer, but not all of them. We will not entirely replace reality with a virtual counterpart, but we will start to hear more and more brands expanding into the metaverse. The much-anticipated Metaverse is still a relatively fresh and unique concept, especially for marketers and companies. However, a wide range of enterprises can profit from this technology because it gives them the freedom to experiment without restrictions and test out novel advertising strategies. Brands will enter a new era of marketing when they learn how to develop new realities that brands can share with their target group of customers.

4.3 Conclusion.

As a final result, the Metaverse is a fascinating and quickly developing frontier for customer service and marketing. The results of the research and survey show that the Metaverse has the potential to provide fresh and inventive approaches to attracting customers and offering memorable brand experiences.

By utilizing the power of 3D settings and virtual experiences, the immersive and interactive nature of the Metaverse offers new chances for marketers to forge close, emotional connections with consumers. Virtual product demonstrations, interactive branded content, and virtual events are a few examples of new experiences that allow customers to connect with goods and services in fresh and interesting ways. The ability to construct totally new virtual worlds and experiences for users makes the Metaverse a perfect fit for the gaming and entertainment sectors. Yet, these sectors are not the only ones where the Metaverse has potential. For instance, the Metaverse may present new chances for businesses to design virtual storefronts and other forms of shopping experiences that provide customers with more ease and customization. This platform may also make use of blockchain technology to provide safe and open transactions that increase client confidence. The ethical and practical ramifications of marketing in virtual

environments must be carefully considered by marketers in order to fully realize the marketing and customer experience possibilities of the Metaverse. In order to avoid diverting attention from the immersive and engaging experiences that marketers are attempting to create, it is important to take these problems seriously. The Metaverse presents new challenges including privacy, security, and data ownership. Furthermore, in order to stay ahead of the curve, marketers will be required to keep up with technical developments as well as continuously create and improve their methods. The Metaverse is still in its early stages, and its future is dependent on several variables, such as technology growth, user adoption, and governmental frameworks. Nonetheless, it is evident that the Metaverse represents a potent and revolutionary new channel for marketing and customer experience, with the ability to completely revolutionize how brands interact with their customers.

In short, the Metaverse has the ability to give marketers fresh and engaging ways to interact with customers and create memorable brand experiences. To assure that the marketers do not invalidate the immersive and engaging experiences that they are attempting to create, they must carefully evaluate the ethical and practical implications of selling in virtual environments. Furthermore, because the Metaverse is still in its early stages, it is critical for marketers to keep up to date with technological developments and to continuously improve their methods in order to stay ahead of the curve. In order to fully understand the opportunities and challenges associated with the Metaverse in terms of marketing and customer experience, and to ensure that it will be developed in a way that maximizes its benefits while minimizing its risks, more research and exploration would be required in the future. It is believed that this research, which makes an important contribution to our knowledge of the Metaverse in the realm of marketing and customer experience, will inspire future investigation and discussion on this fascinating and rapidly developing subject. Marketers who can adapt and seize the opportunities offered by this new frontier as the Metaverse develops will be well-positioned to prosper in the quickly shifting digital environment.

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REFERENCES:

@appROI (2022) *Từ metaverse đến Hiện Thực: Coca-Cola Giới thiệu thức uống thực TẾ ảo đầu tiên*: Bởi Approi Growth Marketing Agency, Brands Vietnam. Available at: https://www.brandsvietnam.com/congdong/topic/327217-Tu-Metaverse-den-hien-thuc-Coca-Cola-gioi-thieu-thuc-uong-thuc-te-ao-dau-tien (Accessed: December 10, 2022).

Amorim et al., 2014 T. Amorim, L. Tapparo, N. Marranghello, A.C. Silva, A.S. Pereira A multiple intelligences theory-based 3D virtual lab environment for digital systems teaching

Procedia Computer Science, 29 (2014), pp. 1413-1422 (Accessed: January 4, 2022)

Ake, C. (2022) *Hyundai captures Gen Z's interest through the metaverse, Harris Poll*. Available at: https://theharrispoll.com/briefs/hyundai-captures-gen-zs-interest-through-the-metaverse/ (Accessed: December 10, 2022).

BasuMallick, C. (2022) What is the metaverse? meaning, features, and importance, Spiceworks. Available at: https://www.spiceworks.com/tech/artificial-intelligence/articles/what-is-metaverse/ (Accessed: December 10, 2022).

Chen & Liu, 2022 Y. Chen, Q. Liu

Signaling through advertising when an ad can be blocked

Marketing Science, 41 (1) (2022), pp. 166-187 (Accessed: January 5, 2022)

Cheng et al., 2022 Cheng, X., Mou, J., Shen, X., de Vreede, T., & Raianer A. (2022), *Call for paper: Opportunities and challenges in the Metaverse, Internet Research,* \(\delta\) https://www.emeraldgrouppublishing.com/calls-for-papers/opportunities-and-challenges-metaverse\(\delta\) (Accessed: January 4, 2022)

Choi and Kim, 2017 H.S. Choi, S.H. Kim

A content service deployment plan for metaverse museum exhibitions—Centering on the combination of beacons and HMDs

International Journal of Information Management, 37 (1) (2017), pp. 1519-1527 (Accessed: January 4, 2022)

Collis, J., & Hussey, R. (2014). *Business research: A practical guide for undergraduate and postgraduate students.* (Accessed: January 4, 2022)

Davis et al., 2009 A. Davis, J. Murphy, D. Owens, D. Khazanchi, I. Zigurs *Avatars, people, and virtual worlds: Foundations for research in metaverses Journal of the Association for Information Systems*, 10 (2) (2009), pp. 90-117 (Accessed: December 10, 2022).

Delb, B. (2022) The 7 layers of the metaverse, Alibaba Cloud Community. Available at: https://www.alibabacloud.com/blog/the-7-layers-of-the-metaverse_599346 (Accessed: February 17, 2023).

Dionisio et al., 2013 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), Article 34, 38 pages (Accessed: December 10, 2022). DOI: http://dx.doi.org/10.1145/2480741.2480751.

Do Barreto 2013, A.M. *Barreto Do users look at banner ads on Facebook? Journal of Research in Interactive Marketing*, 7 (2) (2013), pp. 119-139 (Accessed: January 20, 2022)

Dwaipayan Sengupta, 2021 Dwaipayan Sengupta . (2021). *Nike Acquired This Company That Makes Virtual Sneakers and NFTs for the Metaverse.* Retrieved from https://beebom.com/nike-acquired-company-makes-virtual-sneakers-nfts-metaverse/. Accessed October 12, 2022.

Elmasry et al., 2022 Elmasry, T., Hazan, E., Hamza, K., Kelly, G., Srivastava, S., Yee, L. & Zemmel, R.W. (2022). *Value creation in the metaverse: The real business of the virtual world.* (Accessed: December 10, 2022). from https://mck.co/3rK1D88.

Fang, M. (2022) A deep dive into Gucci's metaverse practice, Medium. Marketing in the Age of Digital. Available at: https://medium.com/marketing-in-the-age-of-digital/adeep-dive-into-guccis-metaverse-practice-5e38d57eaf26 (Accessed: December 10, 2022).

Faridani, A. (2022) Council post: Why the metaverse is marketing's next big thing, Forbes. Forbes Magazine. Available at:

https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2021/12/21/why-the-metaverse-is-marketings-next-big-thing/?sh=5b2a3dee25f0 (Accessed: December 10, 2022).

Fox, D., Gouthro, M. B., Morakabati, Y., & Brackstone, J. (2014). *Doing Events Research:* From Theory to Practice. Routledge. https://doi.org/10.4324/9781315815084 (Accessed: January 4, 2022)

González et al., 2013 M.A. González, B.S.N. Santos, A.R. Vargas, J. Martín-Gutiérrez, A.R. Orihuela

Virtual worlds. Opportunities and challenges in the 21st century

Procedia Computer Science, 25 (2013), pp. 330-337 (Accessed: January 4, 2022)

Hetler, A. (2022) *Marketing in the metaverse: What marketers need to know, WhatIs.com. TechTarget.* Available at: https://www.techtarget.com/whatis/feature/Marketing-in-the-metaverse-What-marketers-need-to-know (Accessed: December 10, 2022).

Hollensen et al., 2022 S. Hollensen, P. Kotler, M.O. Opresnik

Metaverse–the new marketing universe

Journal of Business Strategy (2022), 10.1108/JBS-01-2022-0014

(Accessed: January 10, 2022)

Jaynes et al., 2003 Jaynes, C., Seales, W.B., Calvert, K., Fei, Z., & Griffioen, J. (2003). *The Metaverse: a networked collection of inexpensive, self-configuring, immersive environments.* (Accessed: January 4, 2022)

Kim, 2021 J. Kim

Advertising in the metaverse: Research agenda

Journal of Interactive Advertising, 21 (3) (2021), pp. 141-144 (Accessed: January 10, 2022)

K.J. Nevelsteen *Virtual world, defined from a technological perspective and applied to video games, mixed reality, and the Metaverse*Computer Animation and Virtual Worlds, 29 (1) (2018), Article e1752 (Accessed: January 4, 2022)

Kumar Ravi, Vadlamani Ravi, (2015)

A survey on opinion mining and sentiment analysis: Tasks, approaches and applications, Knowledge-Based Systems,

Volume 89, Pages 14-46, (Accessed: January 12, 2022)

Kwanya et al., 2015 T. Kwanya, C. Stilwell, P. Underwood Library 3.0: intelligent libraries and apomediation Elsevier (2015) (Accessed: January 4, 2022)

Lee et al., 2021 L.H. Lee, T. Braud, P. Zhou, L. Wang, D. Xu, Z. Lin, ..., P. Hui *All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda* arXiv, 2110 (2021), p. 05352, 10.48550/arXiv.2110.05352_(Accessed: January 4, 2022)

Linh Ha (2021) Hyundai và vans "Thi Nhau" Thiết KẾ Trải nghiệm trên roblox để kết nối người dùng: Linh HÀ, Advertising Vietnam. Available at:

https://advertisingvietnam.com/hyundai-va-vans-thi-nhau-thiet-ke-trai-nghiem-tren-roblox-de-ket-noi-nguoi-dung-p17598 (Accessed: February 17, 2023).

Marr, B. (2022) *The metaverse and digital transformation at McDonald's, Forbes*. Forbes Magazine. Available at: https://www.forbes.com/sites/bernardmarr/2022/06/22/the-metaverse-and-digital-transformation-at-mcdonalds/?sh=4b499e73967b (Accessed: December 10, 2022).

Meisenzahl, 2022 Meisenzahl, M. (2022). *See inside the virtual worlds created by Wendy's, Chipotle, and McDonald's as the metaverse becomes the latest battleground for fast food.* (Accessed: December 10, 2022). from https://bit.ly/3PtP3nJ.

Mileva, G. (2022) A deep dive into metaverse marketing, Influencer Marketing Hub. Available at: https://influencermarketinghub.com/metaverse-marketing/ (Accessed: December 10, 2022).

Nabity-Grover et al., 2020 T. Nabity-Grover, C.M. Cheung, J.B. Thatcher Inside out and outside in: How the COVID-19 pandemic affects self-disclosure on social media

International Journal of Information Management, 55 (2020), Article 102188, (Accessed: January 4, 2022)

Papagiannidis and Bourlakis, 2010 S. Papagiannidis, M.A. Bourlakis Staging the New Retail Drama: at a Metaverse near you!

Journal of Virtual Worlds Research, 2 (5) (2010), pp. 425-446 (Accessed: January 4, 2022)

Perry, F. (2022) *Nike will let people design and sell sneakers for the metaverse, Wired.*Conde Nast. Available at: https://www.wired.com/story/nike-will-let-people-design-and-sell-sneakers-for-the-metaverse/ (Accessed: December 10, 2022).

Rauschnabel et al.,2019 P.A. Rauschnabel, R. Felix, C. Hinsch

Augmented reality marketing: How mobile AR apps can improve brands through
inspiration

Journal of Retailing and Consumer Services, 49 (2019), pp. 43-53 (Accessed: January 12, 2022)

Rehm et al., 2015 S.V. Rehm, L. Goel, M. Crespi

The metaverse as a mediator between technology, trends, and the digital transformation of society and business

Journal for Virtual Worlds Research, 8 (2) (2015), pp. 1-6 (Accessed: January 4, 2022)

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students. Pearson Education.* (Accessed: January 4, 2022)

Schroeder et al., 2001 R. Schroeder, A. Huxor, A. Smith *Activeworlds: geography and social interaction in virtual reality* Futures, 33 (7) (2001), pp. 569-587 (Accessed: January 4, 2022)

Team, X.R.T. (2022) What are the seven layers of the metaverse?, XR Today. Available at: https://www.xrtoday.com/virtual-reality/what-are-the-seven-layers-of-the-metaverse/ (Accessed: February 17, 2023).

Verma, S. (2022) *Metaverse for augmented reality, explain Medium. Nerd For Tech*. Available at: https://medium.com/nerd-for-tech/metaverse-for-augmented-reality-explain-300a34f953cd (Accessed: January 10, 2023).

V S, R. and Stephen Moyers (2023) *Why brands are entering the metaverse! future of marketing, SPINX Digital* -. Available at: https://www.spinxdigital.com/blog/whybrands-entering-metaverse/ (Accessed: February 1, 2023).

Wasserman, S., & Faust, K. (1994). *Social network analysis*.

Cambridge University Press Wasserman, S., & Faust, K. (1994). *Social network analysis*.

Cambridge University Press (Accessed: January 13, 2022)

Yogesh K. Dwivedi a b et al. (2022) *Metaverse beyond the hype: Multidisciplinary* perspectives on emerging challenges, opportunities, and agenda for research, practice and policy, International Journal of Information Management. Pergamon. Available at: https://www.sciencedirect.com/science/article/pii/S0268401222000767#sec0215 (Accessed: December 10, 2022).

Zackery et al., 2016 A. Zackery, P. Shariatpanahi, M.M. Zolfagharzadeh, A.A. Pourezzat

Toward a simulated replica of futures: Classification and possible trajectories of simulation in futures studies

Futures, 81 (2016), pp. 40-53 (Accessed: January 4, 2022)

Zhang et al., 2018 Zhang, S., Dinan, E., Urbanek, J., Szlam, A., Kiela, D., & Weston, J. (2018). *Personalizing Dialogue Agents: I have a dog, do you have pets too? Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics, January 2018, 2204–2213.* (Accessed: January 4, 2022)

Zhang et al., 2022 Z. Zhang, H. Ning, F. Shi, F. Farha, Y. Xu, J. Xu, K.K.R. Choo *Artificial intelligence in cyber security: research advances, challenges, and opportunities* Artificial Intelligence Review, 55 (2022), pp. 1029-1053 –2213. (Accessed: December 10, 2022).