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## The Metaverse Adoption Rates & User Satisfaction

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THE METAVERSE ADOPTION RATES & USER SATISFACTION

by


Shannon Kling

Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Arts in Graphic Design  
at  
Lindenwood University

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# THE METAVERSE ADOPTION RATES & USER SATISFACTION

A Thesis Submitted to the Faculty of the School of Arts, Media, and Communication  
in Partial Fulfillment of the Requirements for the  
Degree of Master of Arts  
at  
Lindenwood University

By

Shannon Ketura Kling

Saint Charles, Missouri

May 2023

## ABSTRACT

Title of Thesis: To address the Metaverse's lack of widespread adoption, the platform must implement preliminary improvements that enhance the user experience and therefore generate greater consumer interest.

Shannon Kling, Master of Arts in Graphic Design, 2023

Thesis Directed by: Dennis Schmickle, Andrew Smith, and Jeremiah Ratican

The Metaverse concept is inspired by the vision of a digital utopia where you can be and do anything and everything you want. The Metaverse is thought to provide access to all kinds of entertainment and projects through virtual spaces as a world completely free from human limitations. The Metaverse platform satisfies individuals who seek to escape reality through forms of addictive and appealing integrations solely available through virtual and digital media. Although primarily centered around social connectivity and entertainment through digital means, the Metaverse also offers an entirely new ecosystem for developers, ads, apps, and other new digital innovations.

This investigation seeks to answer why the metaverse has yet to gain prominent traction with the masses and to consider the initial advancements that should be implemented to improve the user experience and overall consumer interest. Furthermore, this research examines possible developed and practical concepts that could secure an in-demand market for the Metaverse. The findings and conclusions of this research hold significance, as they enable the recognition of areas requiring improvement and the introduction of alterations. This enhances the overall functionality, user experience, and appeal of the product and technology. When combined with targeted and purposeful strategies, these insights ultimately result in increased adoption rates, greater user satisfaction, and improved profitability.

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## **Introduction/ Background Information**

The Metaverse and (VR) technology gained popularity over the past few years as innovative systems where users can immerse themselves in interactive experiences. Virtual reality (VR) is further defined as “an artificial three-dimensional (3-D) visual or other sensory environment. VR applications immerse the user in a computer-generated environment that simulates reality through interactive devices, which send and receive information and are worn as goggles, headsets, gloves, or body suits” (Lowood). Typically, the Metaverse is a 3D virtual world experienced through VR where users interact with each other, create content, and explore a variety of virtual environments (Gregersen). Ultimately, the Metaverse exists as a proposed network of immersive online worlds, providing virtual experiences through computer models and simulations. Since metaverse technology launched, it has not only circulated media outlets but has also become a prominent discussion topic for the tech industry. Terms such as NFTs, blockchain, and cryptocurrency were recognized as valuable assets sought after by investors and tech enthusiasts. Unlike prior technology, such as PC and mobile devices, the virtual Metaverse differs from them since the technology is additionally reliant on software rather than hardware. These concepts have proven challenging to grasp logistically, given that the entirety of the concepts, principles, and existence is reliant on computers and technology.

As the platform currently stands, both developers and users have claimed that the platform is too restrictive, thus a need for better logistical planning and overall optimization. Integrating applications will be critical to the Metaverse’s success, but developers are unsure of what to build. Furthermore, developers are unsure of what is needed to make their software profitable (Hoiium). These inventions have proven undeniably well-received through mass trending across media platforms; however, the initial excitement is dying down. What’s more,

several controversies have appeared in media headlines contributing to both negative and positive opinions on the subject. Controversies and inconsistent media coverage have left the industry scrambling to find its path to success. This unstable popularity has investors concerned about the viable future of virtual spaces like the Metaverse. This issue can be seen among the industry's prominent tech giants, "Facebook parent Meta Platforms Inc., which has staked its future on the metaverse, has struggled with glitchy technology, uninterested users, and a lack of clarity about what it would take to succeed" (Herrera). Examining the fallouts of this technology's launch provides an understanding of why the average user is uninterested in the topic. With tech enthusiasts and newly interested individuals vocalizing their ideas and suggestions, the Metaverse will develop as a collectively tailored platform shaped by its users. Through research on the desires of users within virtual spaces and planned methods for implementing new fundamental features, the Metaverse should produce greater adoption rates, user satisfaction, and profitability.



## Literature Review

As one of the most talked about concepts in modern technology, the Metaverse is an immersive, virtual, 3D world where people connect by means of an avatar to partake in a various range of activities (Polona). It is evident that virtual realities, metaverse worlds, and immersive inventions are leading the tech industry into a new digital era of socialization. The Metaverse is considered the next central platform due to the valuable potential it holds, as it meets the criteria of both opportunities for live entertainment and social media integration. The Metaverse is primarily centered around social connectivity and entertainment through digital means, but also offers an entirely new ecosystem for developers, ads, apps, and other new digital innovations. Although the Metaverse has gained popularity over the past several years, respective improvements are essential for the technology to achieve its full potential. The complexity of the social processes that shape the Metaverse requires a considerate approach rather than premature conclusions. To address the Metaverse's lack of widespread adoption, the platform must implement preliminary improvements that enhance the user experience and generate greater consumer interest.

By analyzing the factors contributing to the Metaverse's limited popularity, valuable insights can be gained to identify and implement effective solutions. Despite increased attention in recent years, many people may still be unaware of the Metaverse. Through an examination of the current features within this technology, the inability to seamlessly access and interact with content across multiple virtual worlds and platforms may hinder user engagement. Furthermore, virtual spaces are limited by a lack of unique and innovative content and experiences, which may obstruct their appeal to potential new users. Plus, depending on the platform's needs and level of engagement, the Metaverse may require significant financial investment from users, which may

limit its accessibility. Overcoming these challenges and implementing user-focused enhancements can potentially help the Metaverse surmount these hurdles and attain broader acceptance.

People are interested in experiencing the Metaverse because it offers the potential for a highly immersive and interactive virtual environment where users can socialize, create, explore, and engage in various activities. The Metaverse is envisioned as a new digital realm with endless possibilities for entertainment, but also to escape from the real world and enjoy a different kind of experience. The metaverse term was originally coined from a 1992 science fiction novel titled *Snow Crash*, in which characters used digital avatars of themselves to escape a dystopian reality. The term has since slightly shifted from that original meaning, “Today, the metaverse is a virtual world that exists beyond the physical world, equipped with means for the creation of digital locations for work, play, and socializing” (Benrimoh). This term has established a name for the notion of the virtual world in society. The metaverse has the makings of an exceptional platform, though the metaverse is currently constructed by several companies and organizations. Large tech giants such as Meta, Microsoft, and Google are just a few of the investors that placed large stakes in the development and future of this technology (Gregersen). Although the metaverse currently stands as a term to define virtual worlds created by brands, it may prove more successful to entertain a single metaverse under which they all exist. This crucial Metaverse application is known as interoperability. This refers to connecting different virtual worlds, applications, and platforms continuously (Sloane). The implementation of interoperability is significant as it allows users to navigate freely between different virtual environments without needing to start from scratch each time. Without this feature, users would be confined to a single world which would prevent them from accessing the complete spectrum

of experiences that the Metaverse has to offer. Others with high hopes for the Metaverse also support this strategy, “the experience for a user should be seamless and not depend on the conditions of any one platform without depending on a single platform” (Gregersen). This would also simplify the structural process and present a format for consumers to easily understand guidelines upon. A study conducted on the potential of virtual technology supports this strategy by stating, “All these platforms are still in their early stage and face fundamental technical challenges to realize the grand vision of Metaverse” (Cheng). Although there are many challenges to achieving interoperability, it is widely recognized as a defining characteristic that will have the most significant impact on enhancing user experience and improving consumer interest.

To discover the factors that are needed to further enhance the Metaverse’s user experience, we can examine the non-fungible token (NFT). The NFT began with the idea of giving value to digital assets and has essentially made maintaining the rights to digital assets possible. As our culture became aware of the NFT, several forms of media and celebrities alike claimed benefits through the new invention. The NFT trended for its clever integration of cultural references such as memes, gifs, and other digital media (Schreier). The current issue with NFT culture is the focus on investment profitability. Although there is nothing wrong with this aspect of the technology, the digital asset would prove more purposeful as an artistic item specifically used within the metaverse or virtual gaming industry. Studies on the virtual industry have shown significant growth in NFT-related ventures and NFT use, particularly in games and marketplaces (Herrera). Video games and the metaverse both stipulate an immersion of escape through the use of fantasy and entertainment. The attraction behind these activities is generally motivated by mood-boosting effects or channeling of emotions. Additional aspects that largely

contribute to interest in immersive technology are abilities to discover and collect unique items. As the concept of digital goods emerged, the market eventually centered itself around collectibles such as digital artwork and other types of rarities. Limiting digital goods exclusively to user customization would provide a structure and valid reason for digital assets to hold value.

To expand on the importance of user customization, this is dependent on an individual's perspective of value. There are various reasons why someone would find a specific metaverse world attractive and inviting with these measures in place. Take people who enjoy game skins for example, "Skins are cosmetic virtual in-game items that can enhance and customize a player's avatar, weapons or equipment in a video game, although these skins do not usually affect game-play performance" ("Adolescent Betting"). Other examples include character avatars and in-game items like weapons or outfits. Utilizing digital goods and assets for consumer-centered design and application would enrich the consumer experience. A mixture of technology centered on rarities and customization of artwork could be the driving force that stabilizes the industry. Further understanding of the influence of rare experiences can be explained by understanding the habit of desiring to collect what is rare:

When it comes to our collector instincts, rarer means better... Interestingly, psychology claims that the hunt – the process of searching and trying to acquire the item – releases more dopamine than the ownership itself. It's the apparent unattainability that our minds find both attractive and challenging at the same time. (Benzinga)

There is often a positive response from consumers when there is an element of genuine authenticity and scarcity. Evidence supporting this claim is present in a model linking character customization and game enjoyment. It states, "By offering a variety of settings, choices, and

options, customizable interfaces allow users to modify and transform their media consumption experiences into a highly individualized set of functions and styles” (Kim). Developing more aspects for user customization and marketing the virtual world with this method is a sensible route in regard to marketing digital goods. It would be beneficial for the industry to place limitations on the tokens and exclusive in-game items in addition to opportunities for customization. This concept ultimately supports the notion that digital goods could contribute to the metaverse and allow people to become more involved in the digital world.

Aside from digital goods, another factor that can contribute to establishing the Metaverse as the primary digital experience is applying creative appeal. A failure of imagination behind metaverse developers is noticeable to any prominent tech user or gamer. Despite significant investments from big tech giants, a huge missing element within virtual space development is targeting fan-based culture. What is astonishing is that large companies with franchises like Disney, Marvel, and Harry Potter have not been more prominently integrated into this technology yet. Incorporating franchises within the metaverse is one of the sure ways to drive widespread adoption rates for the metaverse. A study researching consumer streaming services concludes, “...consumers don’t have a strong allegiance to one streaming service over the other, as viewer behavior is mainly driven by content, not provider loyalty” (Forristal). Nothing sounds more enticing for a consumer than the ability to explore a virtual world based on their favorite franchise. This is astonishingly lacking in the media and marketing. Especially regarding developers who are unsure of what to build, when this marketing practice has been used by countless companies since digital marketing first emerged. If the Metaverse is claimed to provide the next evolution of human interaction after social media and telework, incorporating popular franchises would serve as a significant milestone in the expansion of virtual worlds (Benrimoh).

The virtual industry has gained a reputation driven by the ability to ‘own’ virtual objects, land, and experiences. The present majority of individuals involved in NFTs and digital metaverse culture are due to the desire for an experience that provides a sense of escapism or an exciting new experience. The Metaverse is a whole new playground for people to shape and explore, in addition to providing prime real estate for people desiring a subculture who thrive off a personalized world. It's evident from these observations that the consumer market for virtual spaces has untouched potential. The focus of the developers should be on appealing to each consumer since they currently exist with their own psychological reason for being drawn to join the metaverse or virtual experiences. The current marketing strategy should emphasize its approach to improving consumer interest by catering to consumers who need an escape from families, societies, culture, and even the limits of their bodies. Additionally, observing the areas in which traditional virtual technology has yet to satiate consumers, “most traditional VR social platforms ignore emerging characteristics in a metaverse, thereby failing to boost user satisfaction” (Chen). This claim provides evidence of the opportunity the metaverse must resolve this issue and reach its untouched market.

The world of social media and digital culture is evolving at an advanced rate, faster than many notable historical inventions. Whatever direction the virtual market chooses to follow, it is sure to prove an impact, “The idea is to create a virtual reality universe that would allow people to meet, socialize, work, play, entertain, and create” (Bojic). This new phenomenon has much to offer, allowing more creativity and reach to people all over the world. There are innovative concepts within this new market of technology and, with proper development, could satiate the lack of specific creative stimulation that many individuals desire.

However, the Metaverse lacks creativity due to a lack of unique content and experiences, especially regarding a heavy reliance on existing franchises. Without these applications, this may limit the potential for truly imaginative and original virtual worlds within the Metaverse.

Increasing interoperability will allow users to access and interact with content across multiple virtual worlds. Additionally, creative applications for personalized experiences will benefit the metaverse by promoting franchise-driven involvement through experiences that fit consumer preferences. This particular application also promotes immersive and novel experiences that cannot be replicated in the physical world. By implementing enhancements and focusing on improving the user experience, the Metaverse can attract and retain a more extensive user base, as well as increase user engagement and satisfaction.

## **Research Methodology**

The analysis of the virtual market reveals an uncertain future. In this approach, an outcome was determined through a mixture of collected research and new additional concepts. Qualitative methods were used. For this study, qualitative research was used to examine concepts such as possible solutions since the subjects discussed are centered around intangible concepts such as the virtual metaverse and digital goods. Reviewing the available literature on virtual realities provided great examples to define the differences between known virtual reality and the metaverse. Although studies on the virtual market were particularly limited, an examination of similar research projects proved helpful. Examples include discovering the motivations behind gaming and escapism, how user customization affects consumer gameplay, and how the virtual market can attain consumer attention. This was included to understand why these concepts were important and desirable to some as well as how consumers perceive them. It was also essential to grasp an idea of why individuals would wish to seek and experience, such as the metaverse, that would allow them to go beyond the limits of real life. Using qualitative methods provided a thorough understanding of the available market this industry could provide for consumers. It became evident that there will forever be a need for immersive forms of virtual escapism.

Qualitative methods assisted this study in an examination to define newly emerging concepts like digital goods in a virtual world. The virtual industry provoked thoughts and experiences and future platforms for the field of digital and fine arts. Qualitative research was fitting to this study since the accumulated literature for reference, in addition to new theories and concepts, was based on language rather than numerical data. Qualitative methods are best suited to virtual research and the speculative concepts within them. This was chosen since qualitative data collection allows for collecting data that is non-numeric and is used to explore detailed



insight and additional understanding. Optimal conclusions emerged through a careful analysis of various data and sources. An additional significant method used is analytical research to properly use facts and information already available to make critical evaluations of the gathered materials. This in-depth process and evaluation of available information is an attempt to explain the complex phenomenon. The proposed solutions were established through observations and interpretations that were largely determined by analyzing available facts and information. This research was conducted in a formulated strategy of phases. Alerts were set specifically targeting terms within the virtual industry such as NFT and metaverse. This was integrated with further information on concepts such as video game immersion and game customization collected from carefully selected databases. Other methods were not suitable for this study because the research presented was centrally theoretical and conceptually based. Additionally, there was no statistical evidence to analyze.

Philosophical methods were conducted to collect a wide sense of general studies on principles used for theory selection. Much of the discussion on the virtual industry was focused on a philosophical system designed through deductive reasoning. In addition, conceptual analysis was used throughout the study in hopes of clarifying the subject's fundamental issues, conceptual possibilities, and suggested goals. New concepts were suggested through individual a perspective. Through these methods, the conducted study met the intended outcome of providing new theoretical concepts to virtual ideologies. Contributing new perceptions and concepts would optimistically inform the virtual industry of a more favorable future.

Business strategizing was also acknowledged as an additional method of research. A proper business strategy should be aware of the many potential outcomes. Thus, a good strategy for a developing product should discern any potential success or failure. Complex processes are

used to determine these possibilities through many different technical disciplines, such as a variety of observations, inspections, and techniques. The objective is to detect and analyze the causes and costs of a potential failure, as well as to determine what potential corrective actions may be necessary. Through an analysis of past business strategies with failed results, designers can understand their impact and improve their designs accordingly to avoid them and produce a successful product launch and business structure. Effectively analyzing how your business product can succeed can save time, money, and resources. This type of research is used in the development of new products as well as the improvement of existing products. Since the physical production, marketing strategy, and overall business structure make for a complicated process, a failure within a business strategy is rarely caused by a single component. A strategic mindset benefits designers by providing a strategically designed framework that contributes to better user experiences and aligns projects with business results. Implementing a design strategy requires a methodology, a framework, a plan of action, and a way of thinking. In order to implement a design strategy requires a strategic thinking mindset. Strategic Design encourages designers to look at the design process as a problem-solving mechanism, starting by identifying the problem and working to solve that problem since meaningful designs provide solutions.

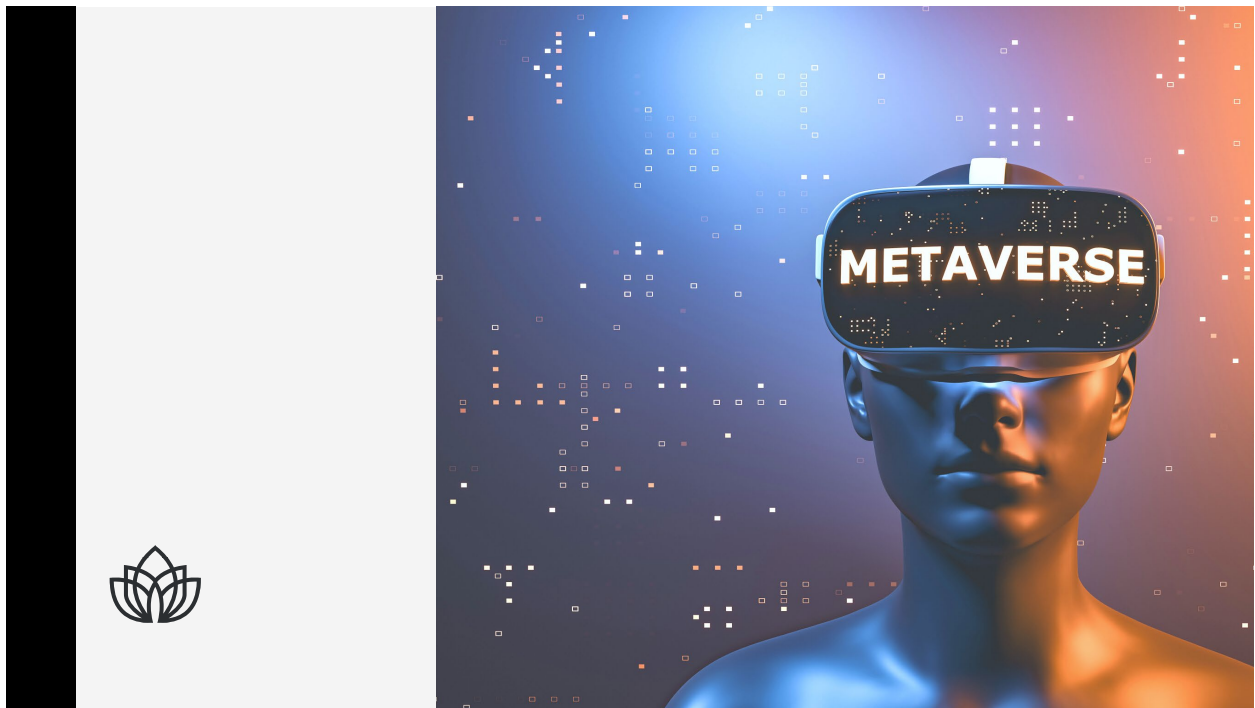
**Production/ Timeline**

The proposed timeline began with the completion of the concept and how I could integrate digital design and marketing. The deliverable is comprised of a planned concept strategy to present as a proposal for improved marketing for the metaverse as well as virtual worlds and businesses. I reviewed the previous areas of study for this topic and began to explore new concepts that had not been addressed for the topic thus far. The thesis and overall study projection were established and approved by my committee chairs. At this point in the timeline, I began to research concepts and ideas to suggest theoretical strategies for the virtual topic. This part was especially difficult since definitive terms for certain concepts within this newly developed market have not been solidified. I accumulated what I could and used my preferred methods of philosophical approaches to analyze literature, conceptualize theories, and use qualitative research methods to produce conclusions. Learning and contemplating through these methods are my personal strength, they are most enjoyable and beneficial in my pursuit of learning. This research with a designed marketing presentation as the deliverable. This research proves to provide insight for marketing purposes, proposed ideas and suggestions, and a general understanding of concepts surrounding this topic.

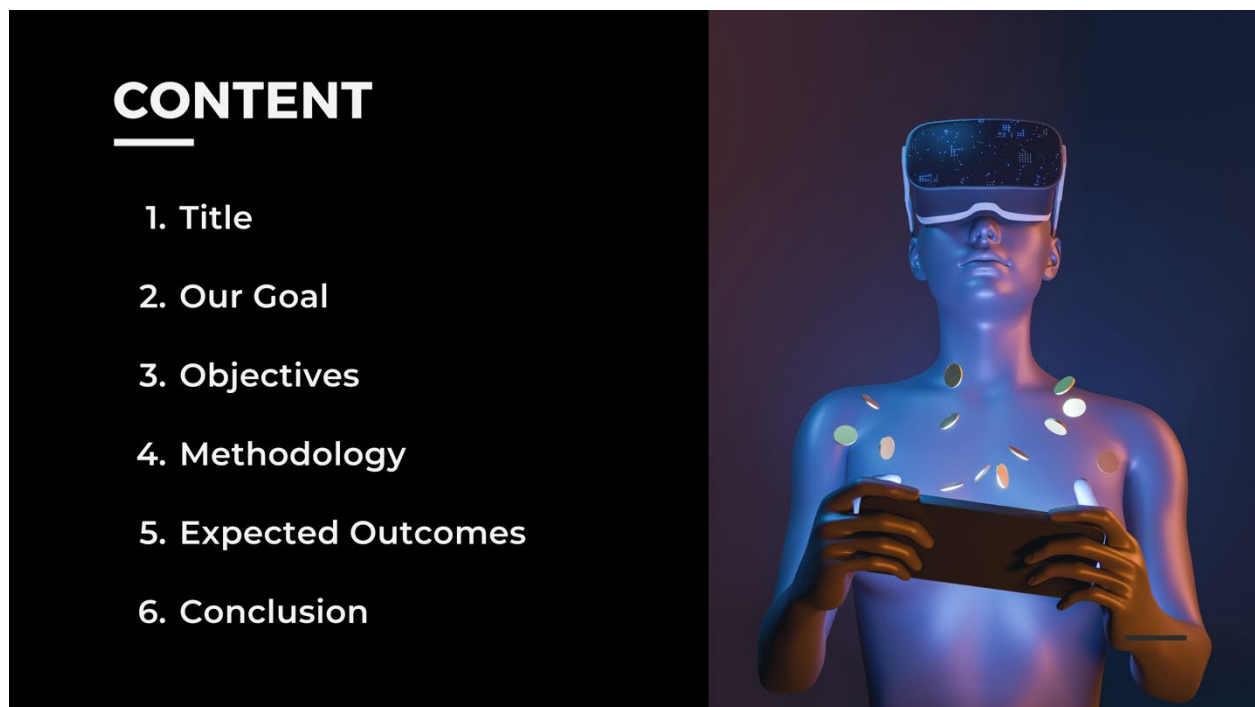
## Conclusions

With the recency of the topic, limited research is available for reference. However, based on the available information, there are noticeable reasons why this virtual marketplace urgently requires optimization. Observations through researching this topic have deduced that the majority of the masses are unknowledgeable about the virtual world and the possibilities it holds. Moreover, a lack of proper strategic planning has resulted in substantial issues for these inventions to advance in development. These problems have accumulated primarily since developers and users have yet to decide precisely what the metaverse is and what to use it for. Success for the virtual market and the metaverse continues to diminish without tech industry leaders stepping forward and providing solutions. The platform must reevaluate its current business strategy to produce viable solutions for the metaverse and gain traction with the masses. It is crucial for the Metaverse to implement initial enhancements, such as franchised worlds, interoperability, and consumer-focused deliverables, to improve the user experience and, in turn, increase consumer interest. Experts believe that the applications proposed may be critical factors in raising the interest rates of consumers toward virtual worlds. The desire for large-scale advances such as interoperability, and virtual worlds rich with creativity to enhance user satisfaction and experience may set the Metaverse project back several years. Additionally, as trends in our culture constantly change, it is difficult to predict an outcome for the virtual platform. Nevertheless, this research provides insight showcasing the need for applications through consumer-backed research in addition to a proper structure, purpose, and appealing elements to market upon. Designed strategies will not immediately fix the lacking elements of the virtual experience that is the Metaverse, but it offers the system ways of assuring that the development is on the right track.


## Illustrations



**Figure 1.** Cover, 10 in x 5.625 in, Presentation, 2023



**Figure 2.** Content, 10 in x 5.625 in, Presentation, 2023



## ENHANCING USER EXPERIENCE FOR THE METAVERSE

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### PROPOSAL

The Metaverse is an exciting new platform that has the potential to revolutionize human interaction and entertainment. However, despite its promise, the Metaverse is still in its early stages, and user adoption has been slow. To address this issue, our project proposal aims to explore ways to enhance the user experience of the Metaverse and increase its appeal to a wider audience.

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Figure 3. Goals, 10 in x 5.625 in, Presentation, 2023

# OBJECTIVES



**IDENTIFY KEY AREAS**  
The primary objective of this project proposal is to identify key areas of the Metaverse that require improvements to enhance user experience.

**STRATEGIZE**  
We will conduct extensive research to determine the challenges that users face in navigating the Metaverse and identify the necessary strategies to improve their experience.

**ENGAGING EXPERIENCE**  
We will develop practical and actionable recommendations to ensure that the Metaverse offers users a more immersive and engaging experience.


**Figure 4.** Objectives, 10 in x 5.625 in, Presentation, 2023




## METHODOLOGY

Our project proposal will be conducted in two phases. The first phase will involve an extensive review of the literature to gain an in-depth understanding of the Metaverse and its user experience. This review will include a study of existing research papers, articles, and other relevant resources.

Then, we will analyze the data gathered from the literature review and gathered information to identify key areas that require improvement. Based on this analysis, we will develop practical and actionable recommendations that can enhance the user experience of the Metaverse.





**Figure 5.** Methodology, 10 in x 5.625 in, Presentation, 2023




## EXPECTED OUTCOMES

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 **AIMS**  
The project aims to provide insights and recommendations that can help enhance the user experience of the Metaverse.

 **IDENTIFY TACTICS**  
We expect to identify the challenges that users face when navigating the Metaverse and develop strategies to overcome these challenges.

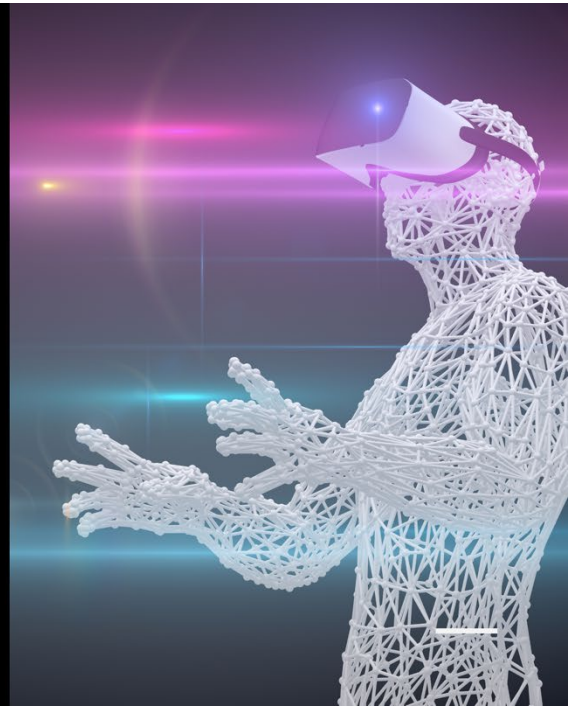
 **RESULTS**  
We anticipate that our recommendations will help increase user satisfaction levels and generate greater consumer interest in the Metaverse.

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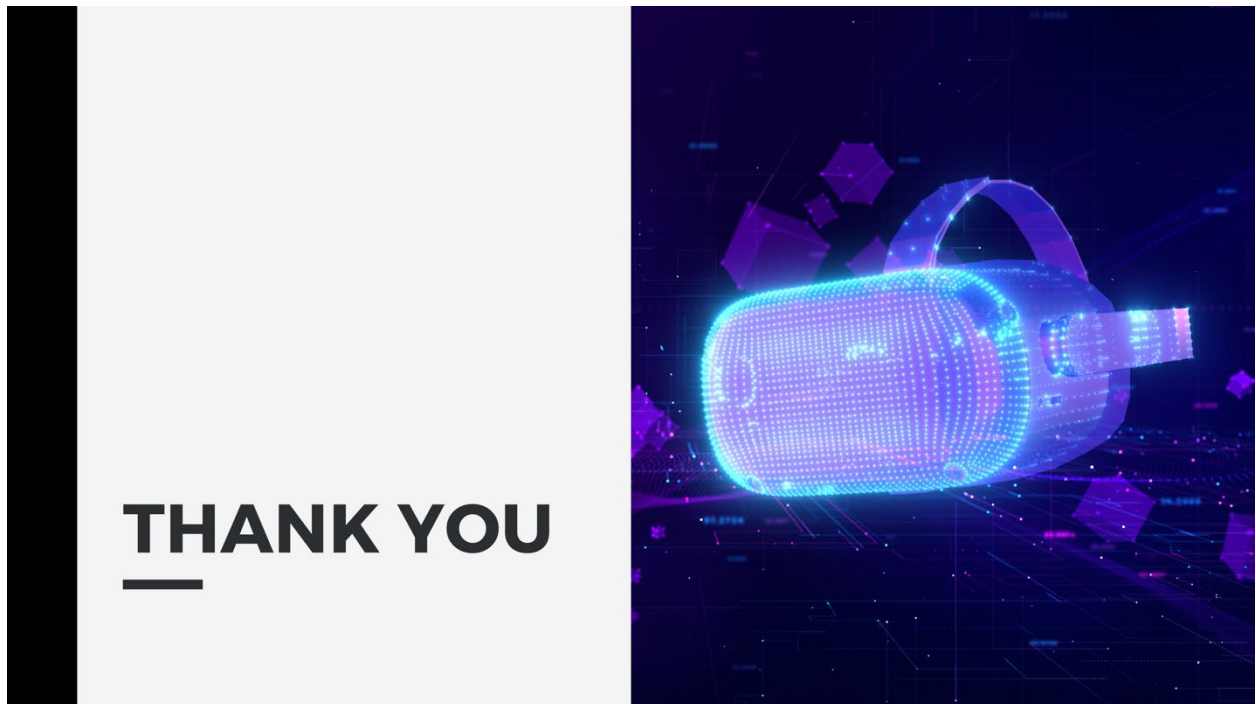
**Figure 6.** Expected Outcomes, 10 in x 5.625 in, Presentation, 2023

## CONCLUSION

The Metaverse has the potential to revolutionize the way we interact and experience the digital world. However, to realize this potential, the platform needs to offer users an immersive and engaging experience. Our proposed project aims to incorporate interoperability, and franchise integrations, as well as identify any additional key areas that require improvement. Our goal is to provide practical and actionable recommendations to enhance the user experience of the Metaverse.



**Figure 7.** Conclusion, 10 in x 5.625 in, Presentation, 2023



**Figure 8.** Thank You, 10 in x 5.625 in, Presentation, 2023

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