

Transforming Digital Marketing Through Metaverse

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Abstract

The study highlights how metaverse technologies, in particular extended reality, have the ability to provide users and customers with distinctive and immersive experiences. The research approach for examining the influence of the virtual world on online advertising, encompassing qualitatively study methods and logical reasoning, is also described in the abstract. Here is a synopsis of the main ideas, based on the abstract: The metaverse, which presents new potential for interaction and customer experiences, is anticipated to be a prominent trend in digital advertising by 2023. In order to develop immersive marketing experiences, a combination of virtual and augmented reality are combined. The research approach incorporates case studies, the concept of interpretivism, qualitative study methods, and research paper analysis. Understanding the immersive characteristics of the virtual universe in digital advertising is the main goal. Several charts are included in the abstract to illustrate the connection between technological advances and company performance, the evolution of the virtual world over time, and the distinctions between real-world augmented realities (AR), mixed reality (MR), and a form of virtual reality (VR). The possible applications of virtual reality and augmented reality in the gaming industry are also covered. It also includes a number of industry sectors, including production, education, health care, sports, entertainment, the hospitality industry, commerce, and

financial services, where the metaverse has the potential to have an impact.

Keywords: Metaverse, Virtual reality, Augmented Reality, Mixed Reality, Digital Marketing.

1.0 Introduction

The role of metaverse in digital marketing can deliver a genuine atmosphere. The approach of metaverse is able to offer absolute freedom and scope for applicant and users. The prospects of metaverse is able to generate the production and creation of unrealistic products and major experience. These factors can be enabled through advanced and effective technological tools through “extended reality (XR)”. The use of metaverse in digital marketing is a modified approach and style which has been the one of the significant marketing trends in 2023. Through the uses of metaverse the perspective the user and applicants is able to realize virtual reality and augmented actual technology to generate unique experiences and realizations for customers. These kinds of factors can be effective in the digital market to gain customer approach and a potential customer base.

2.0 Material and Methods

The materials and methods in transformation of digital media in the metaverse will be based on qualitative study. The methods of qualitative study are focused on interpretivism research philosophy which could be enabled through the study of case studies, websites, grounded theory, examples of cases, and research papers of scholars. The materials will be able to describe the current perspective of research papers to include the factors and immersive experience of metaverse in operations of digital marketing. Apart from that there are several experts who have prescribed that uses and approaches of metaverse will be able to change the future study and can change digital marketing and operations significantly. The enabling of these theories will be a key perspire to demonstrate that uses of metaverse is able to connect virtual reality with real aspects. Through digital marketing people can witness any product through a graphical image whereas through the use of metaverse the customers will be able to realize an immersive experience through 3D graphical presentation (Hadi et al. 2023). This type of theoretical evidence is

effective to describe that metaverse is a key tool in ever changing digital marketing. There are several types and segments in digital marketing which are, social media marketing, online advertising, content marketing, search engine marketing which could be more effective through the uses and application of metaverse. The methods of leveraging tools and examples to justify the topic is based on deductive methods in this research report. To describe the transformation process the research report might be effective to include the metaverse platforms to realize the virtual aspects in digital marketing. The metaverse platform is able to deliver the basic point for “user interactions” and marketing operations. The chosen methods would be able identify the operations and campaigns in digital marketing. Moreover, it can include the importance of contents and strategies in deployment of metaverse. This can involve the strategies of advertisements, sponsored programs and campaigns and other promotional aspects. The chosen materials and methods will be able to signify the research purpose (Neethirajan, 2023). The strength and potentials of methods will be able to deliver an effective understanding of the transformation process in digital media.

3.0 Result

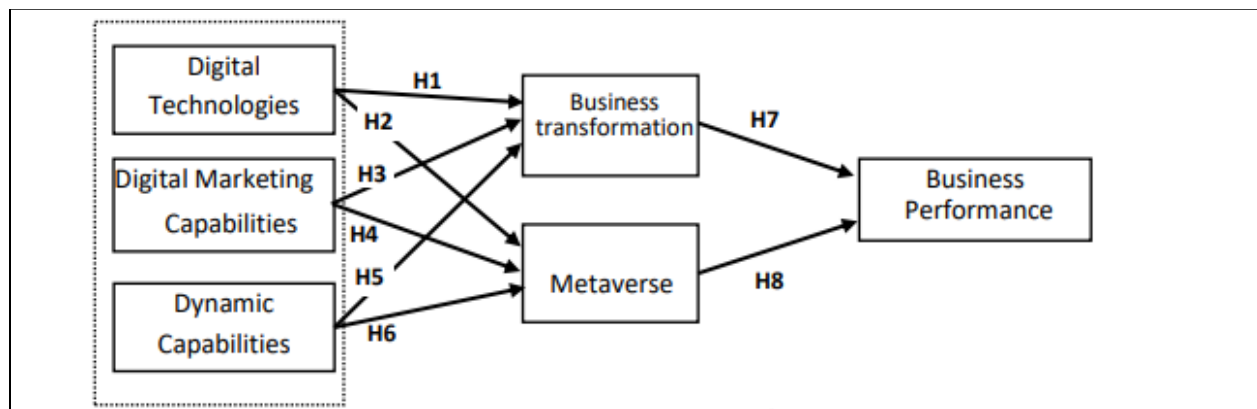


Figure 1: The Conceptual Model

(Source: Yawised, et al. 2022)

The graph shows a positive connection between digital technologies and business execution. It recommends that organizations that take on advanced innovations all the more actually are bound to encounter higher business execution. Digital technologies can permit organizations to convey and interface with one another and their customers. This incorporates innovations, for example, distributed computing, analysis of big

data, the internet of Things (IoT), and virtual entertainment. The chart demonstrates the way that organizations that put resources into digital technologies can further develop their business execution in various ways (NALBANT et al. 2023). It can prescribe other factors like, Innovations can assist organizations with their customers' requirements and inclinations, and to convey more customized and drawing encounters.

Technological aspects can assist enterprises with newer products which will be more innovative and can meet the desire and demand of the customers.

Technological advancement can lead organizations to gain new customers and markets in a globalized perspective [Referred to Appendix1].

However, Organizations need to choose the right advances for their necessities, and they need to put resources into the vital preparation and support to guarantee that they are utilized successfully. The graphical image shows that business change is possible in connection between digital technologies and business performance.

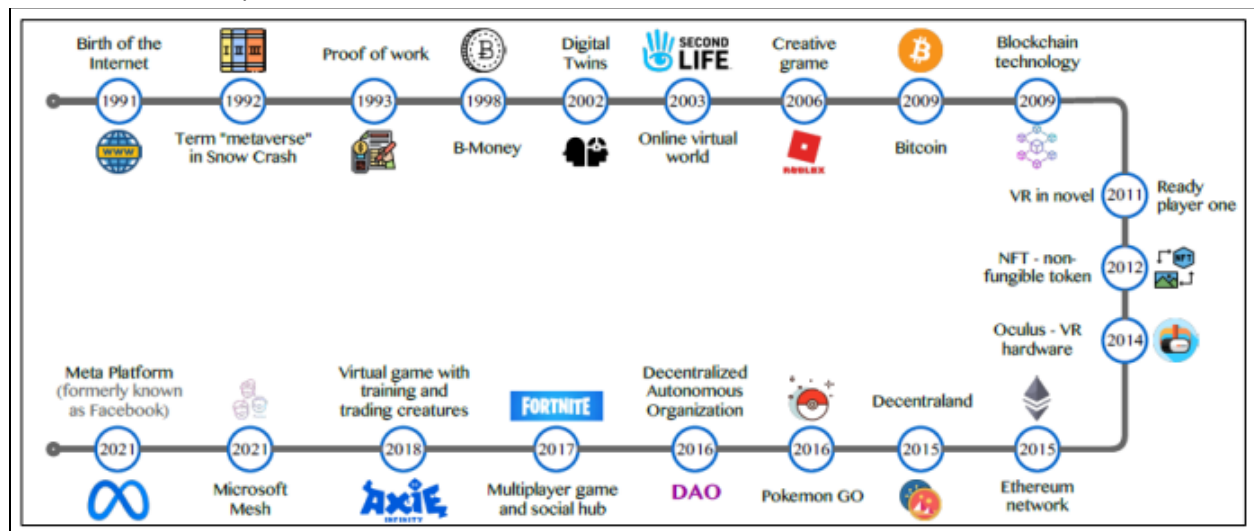


Figure 2: A chronology of growth in metaverse

(Source: NALBANT, and AYDIN, 2023)

The graphical presentation is able to demonstrate the improvement factor of Metaverse which has been initiated since the time of 1990 and still has an effective approach to recent times. In the year of 1992 "Metaverse" was only a concept which has been included in science fiction "Snow Cash". In the next year, in 1993 the foremost concept of the virtual world was created and formed (Rathore, 2023). In the year of 2006 a creative game was

formed by the use of technology of metaverse. Through the similar concept the idea in 2009 Bitcoin was formed through enabling the factor of block chain technology. Later in the year of 2011, another novel on science fiction was formed which demonstrated the future perspectives. It showed that people work and can live in a virtual atmosphere, OASIS. In the year of 2016, a game, “Pokémon GO” was launched which became a popular one in later times. This particular mobile game was initiated through augmented reality to permit the applicants and users to react through the environment of the real world. In the year of 2021, the renowned social media platform “Facebook” was rebranded as “Meta”. The rebranding of the social media platform is evident to prove the development of digital media.

The graphical presentation of the image depicts that collaboration of technologies and platforms are effective and crucial to produce the factors of Metaverse. This could be related to the aspects of “block chain, VR, and augmented reality”.

Augmented Reality	Mixed Reality	Virtual Reality
		
✓ Natural surroundings visible ⊖ Virtual objects visible ✓ Currently available to the public	✓ Natural surroundings visible ✓ Real-looking virtual objects ✗ Currently available to the public	✗ Natural surroundings visible ✓ Real-looking virtual objects ✓ Currently available to the public

Figure 3: Difference between several methods

(Source: NALBANT, and AYDIN, 2023)

According to the above described graphical image, it shows that through AR applicants are able to see natural surroundings with virtual objects. The functionalities through mixed reality are able to depict the real looking objects that can be connected and interact with natural surroundings (Yawised et al. 2022). Whereas VR shows the virtual world of real surroundings. In terms of actual looking of virtual things AR and MR could depict those where VR can only replicate the real things positioned in virtual bases and surroundings. In the current scenario, AR and MR are available but in case of AR it is mostly used whereas VR is much costlier and expensive and needs a specific system. As per the graphical presentation AR and MR are quite the same compared to VR. It is evident that AR and MR permits the applicants to connect with the real world and atmosphere and on the other hand VR completely replaces the real environment with the virtual world.

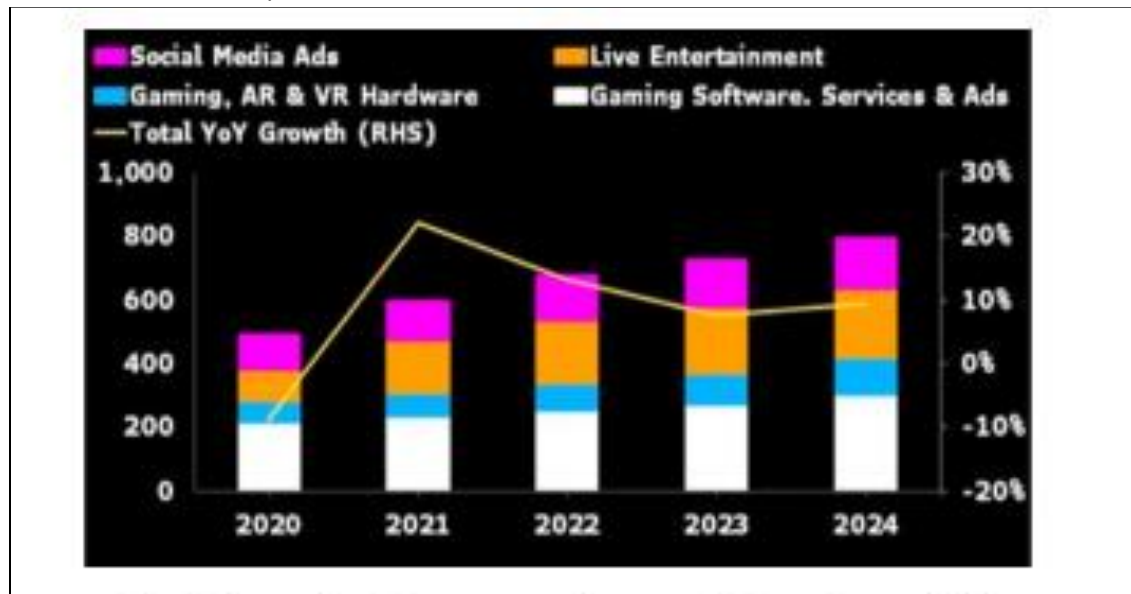


Figure 4: Stats for Metaverse

(Source: Khatri et al. 2022)

As per the graphical image it delivers the gaming development which has increased since 2020 and is still going on. The image depicts that the market of gaming is anticipated to grow which might be increased through the VR technology. This is evident that the market of gaming hardware is increasing already. There are several companies which are active in the gaming market such as, "Sony, Microsoft "etc. The gaming consoles which the company developed have been formed and built through technology of VR and AR. However, the market of AR and VR is still in the

development stage. It can be anticipated that the gaming market of AR and VR will increase in later times (Hwang et al. 2022). The increasing popularity in technological factors will be able to increase the market at a faster rate which can eliminate the basic gaming controls in coming years.

Market Segments	Uses and Applications
Production Industry	This sector is heavily dependent on the uses of design of Virtual materials, production method and procedure, building and construction to develop urban planning and activity.
Healthcare market	Enabled with the process of telemedicine and effective to remote areas for patient care which could be enabled through the metaverse models (Schmitt, 2023).
Education Sector	Lecturers through virtual mode, connection in virtual field and research, research in development of “XR environment”.
Entertainment and gaming market	Permits users to interact with the atmosphere. Enables users to connect concerts and theaters virtually
Sports Sector	Competition in virtual mode, fitness programs through immersive experience.
Hospitality and tourism industry	Focused through virtual experiences in those inaccessible areas. Discovery of historical sites and hill areas.
Commerce Sector	Shopping malls are virtual based, enabling 3D ideas in product view, experience of the brand in virtual mode.
Financial Service	New concepts of currency such as “bitcoin”, and other services like payments and investment.

Table 1: Applications and uses of Metaverse in several sectors

(Source: Self-Created)

4.0 Result and Discussion

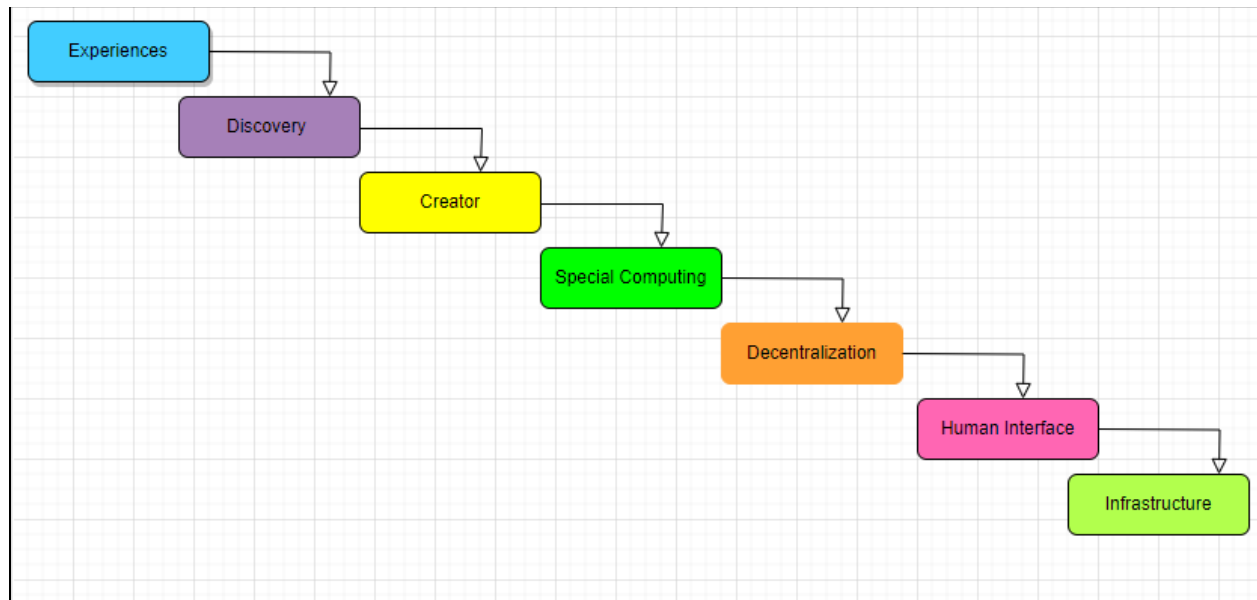


Figure 5: Structure and Major Components of the Metaverse

(Source: self-created in Draw.io)

The structure of metaverse can be categorized into seven levels which are shown in the diagram. This illustration shows the many phases of a new technology's development. The discovery block depicts the process of finding creative applications for the invention, while the user experience block reflects what the consumer does with the technology. The decentralization can show the dependability nature between the investor and the user. The human interface section depicts how the user communicates with the technology, while the special computing section represents the particular capabilities of the technology (Khatri, 2022). The infrastructure block stands for the supporting structure for the technology.

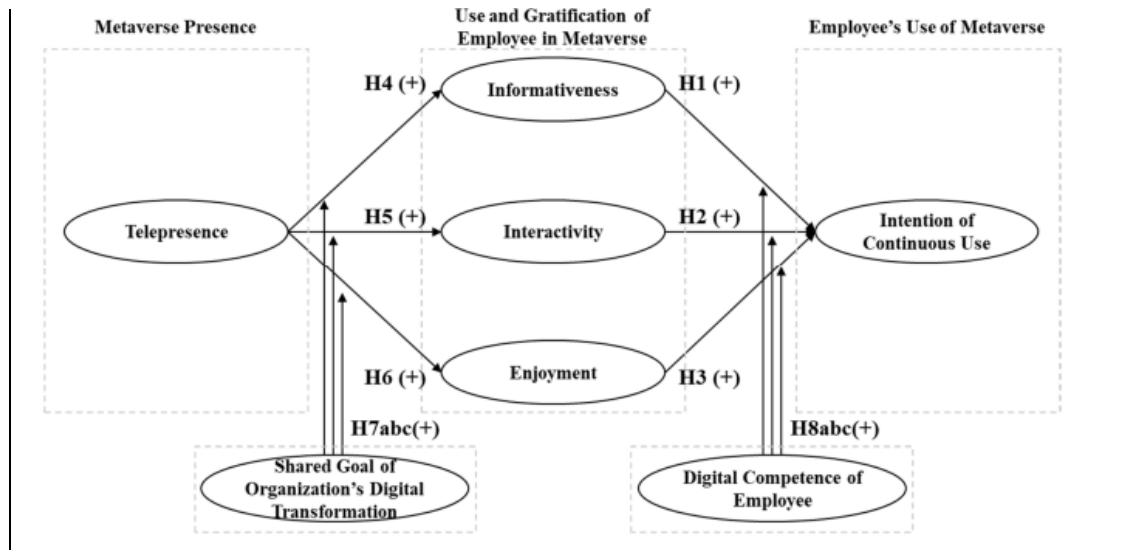


Figure 6: Research Model of Metaverse

(Source: Hwang et al. 2022)

The graphic illustrates the connections between employee satisfaction, metaverse utilization, and presence. The concept of "metaverse presence" describes the sensation of existing in the metaverse or the feeling of existing in an online community with other people. Employees' "use and satisfaction in the metaverse" refers to their motivations for doing so and the advantages they gain from it (Krishnamurthy et al. 2022). The graphic demonstrates how two things affect metaverse presence:

The experience of having a physical presence in the metaverse is known as telepresence. The capacity to communicate with other users and metaverse objects. Employee utilization and satisfaction in the metaverse are influenced by the presence of the metaverse in two ways; the level of satisfaction with which employees use the metaverse. Employees' propensity to continue using the metaverse in future times is indicated by their intention to do so. The figure also demonstrates how the shared objective of the organization's digital shift and employee digital competency control the relationship between employee use and enjoyment of the metaverse and metaverse presence (Cao et al. 2023). Employees' level of alignment with the company's goals for its digital evolution and their belief that the metaverse may assist in realizing this vision is measured by their level of shared commitment to it. Employee ability and understanding in using electronic devices is known as the "digital competence." [Referred to Appendix2].

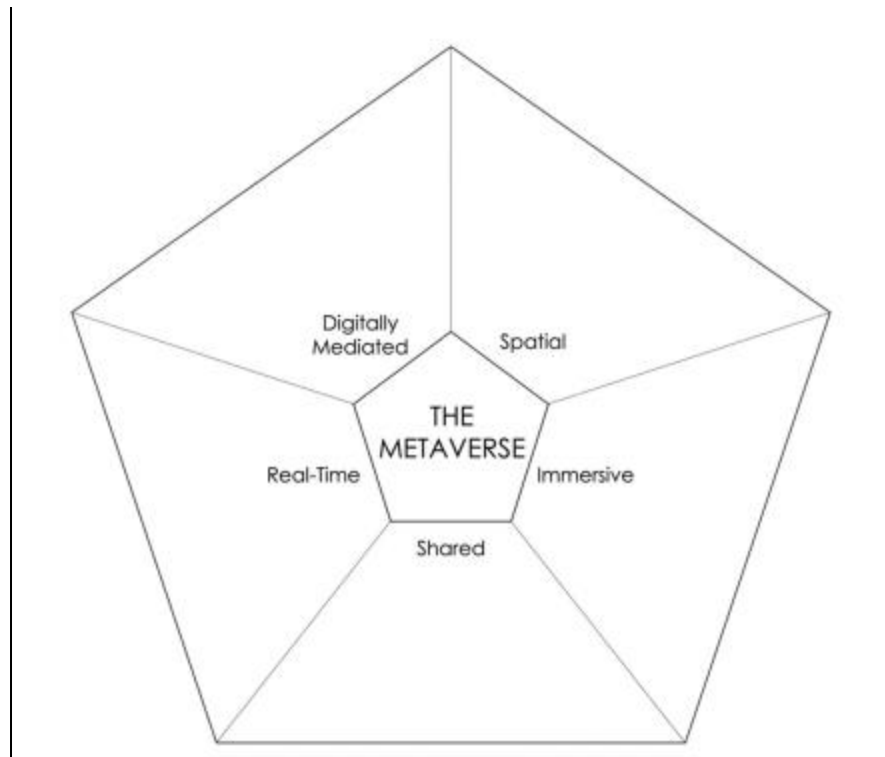


Figure 7: Five key elements of Metaverse

(Source: Hadi et al. 2023)

Digitally facilitated is the All experiences and interactions in the metaverse are technologically mediated because it is a digital environment (Kadry, 2022). Real-time depicts the universe of the metaverse represents a living, dynamic environment where users may communicate with one another and their surroundings in real time. Shared is the element in which People can interact with another person and the same setting throughout the shared world known as the metaverse. Spatial is also an element in which the Meta universe is a spatial environment, users can move about and engage with items in a three-dimensional realm. Because the world of the metaverse is an immersive setting, users can experience a sense of immersion when interacting with its inhabitants and items. To build an alternate universe that is really immersive and compelling, these five fundamental components must be present (Eyada, 2023). The dimension of the metaverse appears less authentic and connected to reality without any of these components.

5.0 Conclusion

The research report is formed by enabling the perspective of methods and materials in the role of metaverse in the digital market. The research report is based on the secondary research purpose which has been extracted from the qualitative study and deductive research method. This research report will demonstrate the ability and prospects of the metaverse in digital marketing. The report has included the methods and results to elaborate the function of metaverse in digital marketing.

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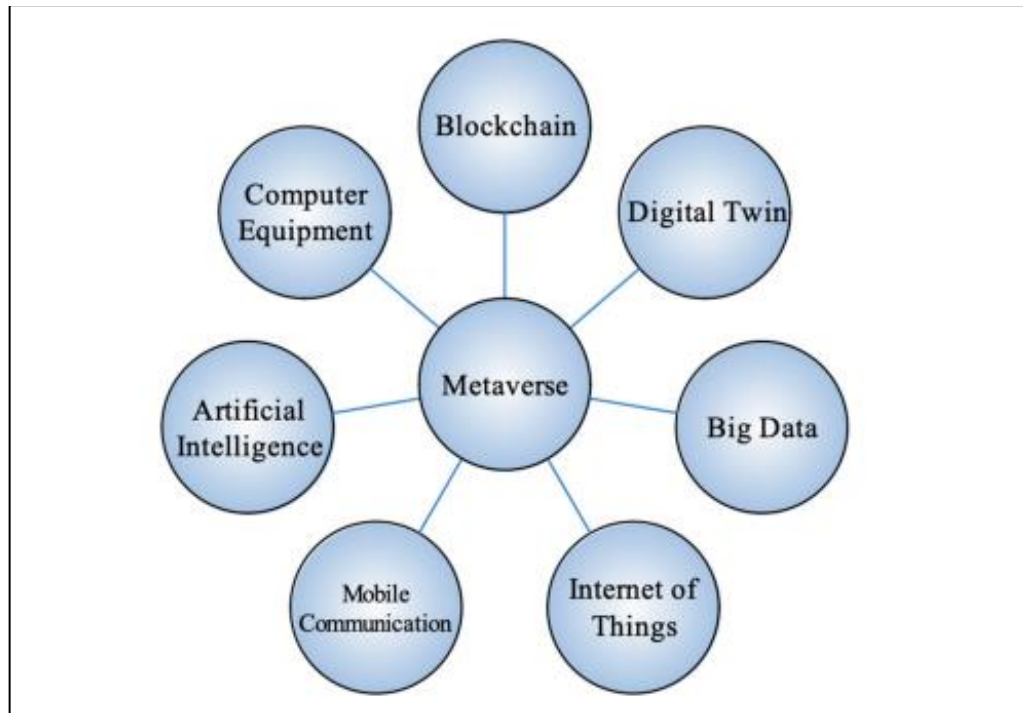
Appendices

Appendix 1: The metaverse influence on Animal welfare and Sustainability



(Source: Neethirajan, 2023)

Appendix 2: Composition of the Metaverse



(Source: Cao et al. 2023)