

The Research on the Co-Promotion of Metaverse and New Media

Yuao Liang^{1, a, *}

¹ *International Event Management Shanghai, Shanghai University of International Business and Economics, Shanghai, China*

a. 19043037@suibe.edu.cn

**corresponding author*

Abstract: Metaverse is a new concept now and many internet companies or technology companies are trying to build a metaverse of their own and attract users. Recently, the metaverse has been studied by many researches. However, not much research has been done on the mutual influence relationship between metaverse and new media, even though both of them are developing with nowadays internet. Besides, social interest on the metaverse has also focused more on its commercial significance and its transformative effect on social media tools. As a result, this research will start from the origins of metaverse and new media, explore the current stage of communication and integration between these two fields, based on the current trends of metaverse and new media, and speculate on the final development trend. The research will explore the interaction between metaverse and new media through the changes of metaverse on cultural communication. Through the research, the relationship between metaverse and new media will be concentrated and the co-promotion between metaverse and new media will be discussed. Finally, the finding is that there are both good sides and bad sides during their co-promotion, and the good impact is more so the co-promotion should be encouraged.

Keywords: Metaverse, New media, Virtual, Real world

1. Introduction

With the continue of COVID-19, many events and meetings converted to or added online forms. from an objective point of view, the epidemic has contributed to the development of the Internet economy. It is in this context that the metaverse has been given the opportunity to develop.

The word metaverse was born in the 1992 science fiction novel Snow Crash by Neal Stephenson. In his book, the metaverse is a virtual world, and it connected the reality with the digital space, and people live in it by an identity of Avatar. This sounds like nowadays internet, but people can really get into it and have a virtual identity. Many other film or novel works also build their background of story in a virtual world, like the Oasis in Steven Spielberg's film Ready Player One or a Japanese cartoon Sword Art Online. Compared with nowadays metaverse that people are discussing, these are more like a game but a virtual world for people to live in, but some concept in them, for example, the brain-computer interface, are what people trying to develop. For human metaverse practice, the metaverse imagination in the movies cannot alone plunder its credit, but without these films, human metaverse practice would not be what it is the way it is now [1].

The industry generally believes that 2021 is the "year of the 'meta-universe'". The development of the metaverse was linked to the development of the Internet and information technology, so the first companies that tried to develop it were also dominated by Internet companies. Facebook has changed its company name to Meta, announcing its official entry into the metaverse, shortly after the company's virtual reality app "Horizon World" officially went live [2]. Within the next five years, many customers will insist on communicating with companies using avatars. They will visit a company's 3-D metaverse site to purchase goods and services including NFTs. They may start out using existing credit cards, but eventually will pay using cryptocurrencies. They will receive customer service in the metaverse. No wonder doing business successfully in the metaverse calls for new business models.

The evolution of new media is similar to that of the metaverse. New media encompasses all digital forms of media, so its development is also closely related to the Internet. On the other hand, smartphones and other mobile devices have made it easier to expand new media. However, the metaverse has not become a new world at the moment. Therefore, its connection to new media is different from the nowadays world's connection to traditional media. The traditional media appeared after the development of society, so the society shaped the traditional media. The new media appeared before the development of metaverse and its own special society, so after the new media bring information to the metaverse society, the feedback from metaverse also reshape the new media, it's a mutual communication and impact.

2. The Impact of New Media on the Construction of Metaverse

2.1. Technology Accumulation

New media is a kind of media product generated by technological innovation based on the comprehensive support of big data and Internet. The new media is a kind of media product generated after the technological innovation, which has the characteristics of wide audience, high target, and strong interaction. The development of new media has rapidly surpassed the coverage of traditional media [3]. Until now, the new media is still on its developing way with the development of internet technology. Every change in information technology and network technology is supporting the development of new media so that they can be more deeply integrated into people's lives. For example, big data is able to cast news content of interest to users, which makes news distribution less expensive and more effective, and attracts more people to read.

Likewise, film as a medium brings the accumulation of metaverse from the cultural level. Digital cinematic images, on the other hand, facilitate the adaptation to a new cultural environment (one mediated by digital technology). It can be argued that the long-term training and domestication of the neurological system of human perception, which also provides physiological preparation for the acceptance of metaverse contexts. Digital cinema images promote the adaptation to the new cultural environment (Digital technology as a mediating environment environment) [4]. The long-term training and domestication of the human perceptual nervous system by movies (and video games) also provides physiological preparation for the acceptance of metaverse situations [4].

2.2. Trend of Development and Impact

Though both metaverse and new media was born from internet, their feedback to the internet is much different. After being integrated with new technologies like edge computing, blockchain, social algorithms, the internet itself is taking a new direction. In some ways, the metaverse may be the future of the Internet, or a new internet that is more concrete and immersive.

2.2.1. Development Trend of Metaverse Led by New Media

If the trend of new media can be found, the direction of the meta-universe can also be speculated. New media that emerge earlier can use their established customer base to bring more trial users to the development of the metaverse, which in turn can facilitate the development of the metaverse. Feedback from users can also be spread through the new media, promoting the metaverse on the one hand, and allowing it to evolve further to be closer to users' usage needs on the other. In this case, new media can be a tool to connect metaverse customers and metaverse developers, and a window to disseminate information about the metaverse to the outside world. This is a kind of co-promotion led by new media.

Guided by the needs of the user community, the metaverse will become more like a media world with a concentration of new media platforms such as social media, thus developing a society within the metaverse itself and emerging a unique culture based on new media. Guided by the new media, these new media tools will become the basis for supporting the metaverse.

2.2.2. The Role of New Media as a Connection

What new media can also do is to coordinate the connection between the virtual world constructed by the metaverse and the real world. As a relatively low technology barrier, VR, MR and AR technologies have become a preferred method of accessing virtual worlds, and in reality, various AR games, head-up display devices like Hololens, virtual digital people, hologram transmission, direct realization of digital assets and other practices have made virtual superimposed and invaded reality [1]. A metaverse based on these technologies will superimpose the virtual world on the real one. The metaverse can not be completely separated from the real world; it is parallel to it, interoperable with it, but independent of it, and people can have real social life in it and work [5]. At this point the users of the metaverse are more like adding a private shell to their world. However, the problem is that those who are not users of the metaverse will be excluded from the system and will not be able to perceive and experience the life in it, which may even cause conflicts between reality and virtual. The advantage of the new media is that it can transport the virtual events in the metaverse to the reality through the Internet, thus linking the virtual and the real, and making the users and non-users understand each other. This kind of connection allows the metaverse and the new media to get co-promotion.

3. Metaverse Gives New Direction to New Media

3.1. A New Platform Provides New Development

Virtual worlds are a basic contribution for metaverses, since they offer the possibility of generating scenarios and interactions that could not occur in the real world [6]. Throughout the history of media development, the key to media innovation is the development of technology. From the changes from traditional media to new media, the internet, the computer and the mobile terminals gives out the new platform. The product Horizon World by company Meta is like a VR game. This is common because Bourlakis et al. had even stated that much of the metaverses originated from massively multiplayer online role playing games (MMORPGs) before branching out into other fields [7]. Users can attend virtual parties or concerts in it, but it is still essentially a social software. Metaverse provides a platform to aggregate more consumers and provides richer online services and more realistic usage experience. It also provides richer ways and sources of information interaction, expanding the amount of information that media can provide - as opposed to the current interactions based on smartphones. A higher dimensional metaverse is bound to achieve a new dimension of interactive socialization through new technology, new concepts and new protocols [2]. On this new platform, a blue ocean

market, new media can get better development. The formation of multi-dimensional and cross-dimensional audiovisual communication ecology of metaverse will break the existing pattern of new media audiovisual communication [8]. In the future, the new media not only provide its works to users in the real world, but also need to provide them to virtual users, so its works need to be sent in different forms, the new media need to get co-promotion with metaverse to find a form suitable for display in the metaverse.

3.2. User Groups

Up to now, most of the users in metaverse are young people. The first reason is that most of the netizens are young people. Young people are better at accepting and learning new technologies than middle-aged people or older people. The second reason is that young people like to do innovate, and the metaverse gives them a chance. Youth have traditionally been pioneers in the adoption of new media. In fact, young people of the 21st century have integrated immersion in virtual worlds and interaction through social networks into their daily practices. Despite the restrictions placed on access to platforms or on the literacy necessary to face the challenges of the Internet [6,9,10]. That's why metaverse attract them: it allows them to show their creativity. It can make their dreams come true. For young people, the real world today are created by older generation, and now there is a new world for them to develop, just like the ancient explorers who explored new continents. For example, Horizon World provides its users with simple tools to creating, scripting, and publishing tutorials. Up to now, thousands of worlds/games has been created by its users and shared on the platform. As the users create in the metaverse, the content of the metaverse itself has also been expanded. After young people build up the frame of the metaverse, older people will start to "move in" this new world and start their virtual life. Under this occasion, new media laid out in advance in the metaverse will gain new users and make great progress from the creativity of these young people.

4. Problems and Solutions

4.1. Barriers and Conflicts in Metaverse

4.1.1. Problems between Metaverses

Every immature technology faces a series of problems at the beginning of its application. Similarly, when new media started to be used in the metaverse, there were many problems that needed to be solved.

To date, the main problem faced by the metaverses is the lack of a common protocol, as is the case with the world wide web, that facilitates both access and contribution from this technology [6]. After the rise of the concept of metaverse in these years, many companies have made layouts for metaverse. Although all of them have made their prototypes relying on the current fast-developing virtual economy, the products, services and caliber of each company are very different. It seems like that different metaverse by different companies will not united together in a short time, so the problem is how to avoid conflicts between these metaverses. These metaverses are like different culture group in society, their likes, dislikes and even values will have differences. Although these metaverses are in a common internet, they have barriers. This will block the exchange of information, even the new media will have difficulties communicating with its users in different metaverse. The metaverse time in different metaverse is not a real metaverse. It has no differences with the time when people use different social media from different companies or different website in our internet, so the boundaries need to be weakened to at least allow the new media to spread information freely.

4.1.2. Problems between "Worlds"

Bigger problems are between two different worlds, one is our real world, the other is the virtual world represented by the metaverse. With the formation and development of the "meta-universe", the frequency and frequency of switching between reality and virtual will grow positively and become normalized, just as people have to open their cell phones for interaction every day nowadays [8]. To reach this level, one needs to be able to move quickly between the metaverse and the real world, but most of the ways to enter the metaverse now are through complex VR devices, and the information between the metaverse and the real world does not interoperate. Still using Meta's products as an example, the Horizon World has its own Facebook official community, but the communications out of the VR platform are still can't be seen by the users who are using metaverse, even though they are developed by a same company. Further more, now the metaverse users are only able to see part of the real world messages. If this problem can not be solved, the gap between the metaverse and the real world will deepen and conflicts will emerge. Likewise, the development of new media can be bogged down by the fragmentation of the two platforms.

4.2. Equality and Law in Metaverse

The current metaverse boom is overflowing with techno-optimism, and the films have already provided multifaceted warnings and reflections on the metaverse and reflections on the possible real risks, technological paradoxes and ethical crisis [1]. The 2010 movie *Tron: Legacy* show us how Utopia changes into a Dystopia under the control of Digital Technology. The *Matrix* and many other similar movies show a world where human are controlled by programme and AI. Although these are plots in science fiction movies, developers still need to pay attention.

Back to our real world, compared with developed countries, many developing countries do not even have perfect Internet infrastructure construction, not to mention related new media development and laws. As a result, if the metaverse truly become a future, the gap in metaverse construction between developed and developing countries will widen again. The laws governing the metaverse are currently lacking, the digital values, digital ethics, digital information content ecological governance, digital virtual space security and other issues facing mankind in the digital information age will inevitably continue and expand in the metaverse [11]. If not effectively regulated, cybercrime, money laundering, illegal transactions, etc. may emerge in the metaverse.

Currently to enter the metaverse requires VR equipment, and the purchase of equipment in this area will also be the cause of inequality arising. Information and communication technology development affects the learning methods and media used [12]. When education is combined with the metaverse, this inequality carries over to the educational side. AR systems are used to integrate virtual information into an actual environment so that students can see the information as it is in their state [13]. This technology is an update in education that will give rise to different learning styles and is expected to promote the teaching and learning process [14]. Students from backward areas or poor families do not have access to this system, which results in differences in learning pace and efficiency, thus creating inequality in education.

4.3. Solutions

To solve these problems, new media need to play its unique role. From the various the definition and expectations of the metaverse, many features proposed by the metaverse are breakthroughs and innovations in Internet technology are worth looking forward to, and will bring more useful thoughts and possibilities for the development of new media. It will also bring more useful thinking and more development possibilities for new media development [15]. While the media can guide social opinion, new media can influence people in both the meta-universe and the real world through the breadth of

its communication, leading even more strongly. Social organizations can urge the government to introduce relevant laws to monitor the metaverse as soon as possible through the power of new media. The role of new media can also allow those companies to weaken the boundaries between different metaverse by unifying the network caliber and opening up data, and move toward a truly integrated metaverse. The Internet has evolved to the point where users' immersion and participation are increasing, and the boundaries between virtual and reality are becoming increasingly blurred [15]. New media can become a bridge connecting virtual and reality, truly breaking the barrier between virtual and reality. At the same time, new media can also provide technical support for the metaverse and become a tool to transfer information between the two worlds. For the educational industry, students must also improve their technological skills [16] to compete in future global economic competitions [12]. Although there is an inequitable side, the metaverse can still take advantage of its strengths to rebalance educational resources through sharing, so that students in backward areas can also learn about advanced technologies. The metaverse can be a platform for sharing educational resources, and new media can be a tool to help share and carry content.

5. Conclusion

This research explores the relationship between the metaverse and new media. Through the study of the impact between metaverse and new media, although there are potential conflicts in the development of metaverse (between different metaverse and between metaverse and the real world), and there are also risks such as unbalanced development and lack of laws that can negatively affect the integration of new media and metaverse, in general, there are still many opportunities for the co-promotion of both sides. Overall, the metaverse is still evolving, and its immature construction and the boundaries between different companies' products make it necessary for new media to make changes to better thrive in it. The advantage of new media in its development mainly comes from the fast developing information technology. At the same time, the development of the metaverse comes from the rapid development of the Internet, and new media is also developing rapidly with the Internet, and the cores supporting both are the same, so it will be easier for new media to cooperate with the metaverse and enter the metaverse. The development of new media actually plays a forward and backward role, which can try to make an impact on the society within the meta-universe by referring to the operational relationship between traditional media and society. Since the meta-universe is still under construction, studies on meta-universe are conservative and are usually analyzed through film and television works or games. This study examines the interplay between new media from this perspective and identifies the possible risks from different aspects, providing a reference sample for further analysis of metaverse and new media that may be done in the future. The shortcoming of this study lies in the immature development of the metaverse at the current stage and the few references found, which are mostly theoretical analysis studies from China. It is expected that in the future, when the market becomes mature and stable, more in-depth analysis can be conducted with more sufficient data.

References

- [1] Pengxin,Y.(2022) *Film and metaverse: two-way influence and digital substrate* [J]. *Film Art*, 2, 50-58.
- [2] Kun.C.(2022) *The "Metaverse" Empowers the innovative development of new media*[J]. *Southeast Communication*, 02,35-36. doi:10.13556/j.cnki.dncb.cn35-1274/j.2022.02.013.
- [3] Xinyan.W.(2022) *On the impact of new media in the era of traffic - taking meta-universe as an example*[J]. *News Culture Construction*, 5,12-14.
- [4] Roger F. Cook.(2020) *Postcinematic Vision: The Coevolution of Moving-Image Media and the Spectator*[M].University of Minnesota Press.
- [5] Xiaochen,D.,Dan,L.(2022)*The impact of media change on multicultural communication in a metaverse perspective*[J]. *China Radio & TV Academic Journal*, 6,30-32.

- [6] Julián de la Fuente Prieto, Pilar Lacasa, Rut Martínez-Borda.(2022) *Approaching metaverses: Mixed reality interfaces in youth media platforms*[J]. *New Techno-Humanities*,51,1-10. <https://doi.org/10.1016/j.techum.2022.04.004>
- [7] Edward Shin, Jang Hyun Kim.(2022) *The Metaverse and Video Games: Merging Media to Improve Soft Skills Training*[J]. *Journal of Internet Computing and Services*,23(1),69-76. <http://dx.doi.org/10.7472/jksii.2022.23.1.69>
- [8] Kuang,Ye.(2022) *The core advantages of audiovisual content development of broadcasting media in the era of "metaverse"*[J]. *China Television*, 6,82-86.
- [9] boyd danah.(2014) *It's Complicated:The Social Lives of Networked Teens*[M]. Yale University Press, [http://refhub.elsevier.com/S2664-3294\(22\)00010-3/sbref0006](http://refhub.elsevier.com/S2664-3294(22)00010-3/sbref0006)
- [10] Ito Mizuko,Baumer Sonja,Bittanti Matteo,boyd danah,Cody Rachel,Stephenson Becky Herr,Horst Heather A.,Lange Patricia G.,Mahendran Dilan,Martínez Katynka Z.,Pascoe C. J.,Perkel Dan,Robinson Laura,Sims Christo,Tripp Lisa,Antin Judd,Finn Megan,Law Arthur,Manion Annie,Mitnick Sarai,Schlossberg David,Yardi Sarita,Horst Heather A.(2009) *Hanging Out, Messing Around, and Geeking Out:Kids Living and Learning with New Media*[M].The MIT Press.[http://refhub.elsevier.com/S2664-3294\(22\)00010-3/sbref0021](http://refhub.elsevier.com/S2664-3294(22)00010-3/sbref0021)
- [11] Kuang,Y.(2022)*The construction of metaverse multidimensional cross-dimensional information dissemination pattern in the mainstream media perspective*[J]. *Chinese Editorials*, 2,17-22.
- [12] Marini, A., Nafisah, S., Sekaringtyas, T., Safitri, D., Lestari, I., Suntari, Y., Umasih, Sudrajat, A. and Iskandar, R.(2022)*Mobile Augmented Reality Learning Media with Metaverse to Improve Student Learning Outcomes in Science Class*. *International Journal of Interactive Mobile Technologies (iJIM)*, 7,99–115. DOI:<https://doi.org/10.3991/ijim.v16i07.25727>.
- [13] Alwan, N., Cheng, L., Al-Samarraie, H., Yousef, R., Alzahrani, A. I., and Sarsam, S. M. (2020) *Challenges and prospects of virtual reality and augmented reality utilization among primary school teachers: a developing country perspective*. *Student in Educational Evaluation*, 66. <https://doi.org/10.1016/j.stueduc.2020.100876>
- [14] Ayo, E. B., Montero, D., Dote, D., Villanueva, L., and Verano, C. (2020) *Development of online teachers-student consultation application*. *International Journal of Interactive Mobile Technologies*, 14(8),114–125, <https://doi.org/10.3991/ijim.v14i08.11284>
- [15] Zhang L, Yu H Na.(2022) *New media evolution and strategy under the concept of metaverse*[J]. *Media*,14,25-27.
- [16] Olszewski, B. and Crompton, H. (2020) *Educational technology conditions to support the development of digital age skills*. *Computer and Education*, 150,1–2. <https://doi.org/10.1016/j.compedu.2020.103849>