

METaverse WITH CULTURE TOURISM IN THAILAND

**Wisissak Udommala, Pattama Suriyakul Na Ayudhya,
Kantika Klomsuwan, Thitawan Insaad**

Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand
E-mail Wisissak.u@ku.th; Kantika.kl@ku.th; thitawan.i@ku.ac.th
*Corresponding Author; E-mail: pattama.s@ku.ac.th

ABSTRACT

The metaverse is a concept from science fiction that many players in the tech industry visualize to be the successor of today's internet. It, therefore, refers to a network of virtual environments that allows numerous persons to interact with one another and with digital objects as they operate on virtual representations of themselves – avatars. One could think of it as a blend of the web, immersive virtual reality, and multiplayer online role-playing games. Its main aspects are presence, interoperability, and standardization. Numerous companies aim to make it the setting for diverse online activities such as work, play, shopping, and studying. Despite being a fictional concept, the idea of the metaverse has existed since the 1990s, and only recently has it become well known due to technological advancements. Due to this, businesses have embraced the concept of metaverse travel and tourism opportunities and are looking forward to capitalizing on them. Therefore, it is one of the emerging tourism trends in the world. The metaverse blockchain project in today's world helps construct a universe where digital assets such as the metaverse tokens and digital identities such as the Avatars build a basis for asset trades through a valued intermediary. The technology, therefore, inaugurates a new blockchain network that will change human civilization and allow societies to enter into a new reality.

Key Words: Metaverse, Avatar, Web, Technology, Virtual, Augmented, Cultural Tourism

INTRODUCTION

Metaverse tourism helps people to gain a better understanding of what the tourism industry means in a country. This section of the service industry concentrates on short-term travel activities of people away from their homes. These activities include transportation, accommodation, entertainment, food, and beverages. The metaverse is rapidly changing the tourism industry. The Covid-19 pandemic was an angel in disguise because it helped show the extent to which the travel industry is vulnerable and how people could use other ways to explore the world without putting their lives at risk. Putting these vulnerabilities to light helps focus on

the most important ways the metaverse could help transform the travel industry. This means that the idea of interactive virtual worlds could help customers change how they engage with other locations and may change some aspects of physical travel without the industry being dragged behind due to this change. The purpose of this research paper is to discuss metaverse with cultural tourism in Thailand by evaluating the country's preparedness rate for metaverse, some examples in which Thailand could take advantage of the metaverse, and how it works with cultural tourism in Thailand.

Preparedness of Thailand for Metaverse

Without a doubt, the metaverse is still in its infancy. Despite this, it is an advancement that will tremendously grow overnight because of the race that different nations have for technological supremacy. It is, however, worth asking whether Thailand is ready for such a digital revolution. Countries with a huge technological prowess have the most advantage, such as Korea, which already possesses a five-year plan to transform its capital, Seoul, into a metaverse-dominated region. Positively, Thailand is not left behind with this technological revolution. Public and private sectors eagerly welcomed the metaverse wave (The Diplomat, 2021, pp.4).

Moreover, in terms of technological giants, Thailand is one of the leaders of 5G and e-commerce technologies in Southeast Asia. Additionally, the metaverse is well-matched with Thailand's 4.0 initiative, an economic model that aims to ensure economic prosperity, social well-being, raise human values, and protect the environment (The Diplomat, 2021, pp.5). There are also significant metaverse developments that have been witnessed in Thailand today, such as the Metaverse Thailand project by APLUS Fintech Company.

On a national level, the country acknowledged the metaverse as a significant technological advancement by recently creating a Thai term for the technology, which translates as a newly constructed universe (The Diplomat, 2021, pp.1). However, despite Thailand being among the technology giants in the world, it still has a very long way to go for metaverse to be properly inculcated in its economic sectors. For starters, private and public organizations in Thailand are vulnerable to cyber-attacks. For instance, in 2021 (Leesanguansuk, 2021, pp. 1), leaked personal data to 106 million international visitors. There were attacks on State hospitals, banks, insurance companies, and Bangkok Airways within the same timeline.

Moreover, Thailand's cyberspace is concentrated with individuals that portray a fierce domain of political contestation. Considering that the metaverse is a region where people will

be interacting using avatars and altered voices (Buhalis & Karatay, 2022, p. 16), the internet evils are most likely to multiply – the spread of fake news, ideological extremism, and blowout of malicious content. A variety of groups – the state, opposition parties, extremists, reformists, and factions – are most likely to capitalize on the new platform to promote their agendas for their gains, which will most likely disrupt the social order of the platforms.

How Thailand can take advantage of the Tourism Industry using the metaverse

The Covid-19 pandemic has played a significant part in showing the travel industry's vulnerability. However, incorporating the metaverse in the industry has helped people understand the solutions it has brought to the world and how different companies are taking full advantage of technological advancements in this area.

Virtual Reality Tourism

Virtual reality technology synchronizes with the idea of metaverse traveling because it has to take traveling to a whole new level. With virtual reality technology, a user's experience replaces the need to travel or enhance the already existing traveling experiences (Wagler & Hanus, 2018, p. 457). Virtual reality tours are a significant change to the traditional method of traveling because they offer realistic tourist experiences from the comfort of one's home. Given that Thailand has numerous tourist attractions and a beautiful lay of the land, its tourism companies could use VR to showcase tourist attractions and host virtual concerts, offer virtual entertainment events, and allow users from different countries to host virtual business conferences. Additionally, Thailand could use its metaverse technology to engage clients in virtual theme park tours and activities, museums, zoos, and similar attractions. Thailand, which has several theme parks, zoos, museums, virtual theme parks, and similar attractions, could positively impact its economy because it would not be subject to the same safety regulations as a real theme park.

Moreover, older tourists would prefer it because it is not certainly bound by the rules of gravity, meaning that the tourists would get to do activities that they would not have a chance to do in real life. Correspondingly, a virtual zoo would not require the presence of a guide for a tourist to obtain entrance and provide care to animals. The animals present in the virtual zoos would also be diverse, ranging from existent, extinct, and fictional animals.

Augmented Reality Tourism

Augmented Reality (AR) is revolutionizing the tourism industry and providing metaverse travel and tourism solutions. Today, most travel companies use smartphones with AR software/applications to provide information about the real world. Thailand could therefore leverage this technological advancement to enhance their physical environments to encourage clients to visit their travel destinations. The country's travel industry could also avail as much information onto augmented reality apps as possible. This is because, before traveling, customers often conduct heavy research on their destination prior to traveling - the prices, activities that they have to offer, and any other security information. This need for information does not stop after the tourist arrives. Through availing tons of information, the travel companies or hotels would make clients trust them more and heighten their chances of being picked over other destinations, which is generally good for the country's economy. Some of the elements that Thailand could embrace when it comes to AR include interactive hotel elements, augmented tourist destinations, beacon technology and push notifications, and amplified reality gamification.

Facilitating Online Trade Shows and Expeditions

Among the economic activities affected when the Covid-19 pandemic hit was; trade shows, expos, and similar events. Since most companies rely on them to boost sales, they need to be brought to an online sphere. Therefore, Thailand could embrace metaverse tourism and travel to solve the issue and avoid it in the future by taking online events to the next level (Um et al., 2022, p. 235). Most people worldwide would be attracted to these occurrences, and eventually, this would reflect positively on Thailand's tourism industry.

How metaverse works with cultural tourism

In Thailand, the metaverse could promote the tourism culture in various ways and holds benefits that help transform the industry. For starters, metaverse in the travel industry would help in inspiring tourism-related purchases. For instance, through virtual reality experiences, potential tourists could have experiences that recreate real-world environments, enabling them to know what they might expect after they decide to visit the destination. Like hotels and transportation, VR can help travelers comprehend what hotels or Airbnb have to offer and how long it takes to drive from the airport to their property and the states of the country's roads. Eventually, this implies that the metaverse can be useful in inspiring tourists to visit the area

when they have a virtual experience of the area and ultimately book a stay in their desired hotel in the country.

Second, metaverse could greatly enhance tourists' booking experience. Apart from inspiring, a metaverse tourism solution could enhance the booking process by availing key information that could not be delivered effectively in other ways. Ultimately, this increases the chances of a client making a booking (Um et al., 2022, p. 72) instead of backing out and searching for alternative destinations. For instance, hotels in the country can use VR tours, travel agents, or avatars to grant potential customers the opportunity to look around at their recreational destinations to feel the sizes of the rooms and the kind of facilities offered.

Third, metaverse could ultimately improve the booking volume of hotels in Thailand, hence eventually serving its real purpose. Metaverse increases booking volumes because of a combination of the two factors mentioned above. Initially, the potential clients can gain inspiration from VR and AR technologies, making the process of booking hotels, restaurants, and other activities much more enjoyable. In turn, this would be important in influencing booking decisions and increasing the number of clients they attract.

Drawbacks That Thailand is most likely to face after embracing metaverse in Tourism.

Metaverse tourism is an expensive project, given its complexity. This means that Thailand is most likely to experience several drawbacks after embracing the technology in its tourism industry. The first drawback that the sector is most likely to face is the increased cost of training the workers to be proficient with how the technology works. Moreover, the country would stand to lose customers who originate from countries that lack these resources. The high costs would be associated with the need to have accessible advanced digital technologies. Several technologies and protocols are already available to implementers of the metaverse. However, the concept will demand additional investments in developing and acquiring newer technologies. For instance, obtaining faster and more reliable internet connectivity is a prime example. For people to participate in a shared virtual space, they would have to be utilizing a connection with reliable data transmission speed given the graphical intensity. Currently, some countries operate with fiber-based broadband connectivity, while a few use the 5G network technologies (Ning et al., 2021, p. 6). However, most regions in the world still have unreliable internet connectivity. The fact, therefore, stands that most people in the world still lack reliable services, which would make Thailand lose clients from these regions, and hence their economic gains from tourism would considerably drop.

On that note, metaverse in the tourism industry would demand access to relevant digital tools, meaning that embracing it would entice people to participate in the metaverse and result in discrimination of those who have the means to purchase from businesses that lack such purchasing power. In Thailand, the tourism sector is comprised of large hotels and activities that engage high-paying international tourists only. There are smaller-scale business enterprises in Thailand's market, such as Airbnb. Often, the owners of these small-scale enterprises do not have the purchasing power that five-star hotels have, therefore alienating other players from the promised benefits of the metaverse.

The existing problems of the internet that remain unsolved are also likely to be mirrored in the metaverse. These include cyberbullying, privacy and security risks, propaganda and the spreading of misleading information, and many other forms of cybercrime. These problems are likely to worsen with the introduction of another technological iteration, which would ruin the reputation of Thailand's tourism industry and make potential tourists more skeptical about visiting the country since they would be worried about their safety and privacy. The metaverse is bound to face prevailing and upcoming security issues because other social media platforms have been riddled with the same controversies. Platforms such as Facebook, YouTube, and video conferencing platforms have faced criticisms for being too invasive of their users' privacy because of the amount of data they collect from them. The users' information is usually collected, sold, and used to carry out intrusive online adverts, identity thefts, and promote cybercrimes. Often, most companies behind these platforms have failed to address the criticisms thrown at them, and the companies running meta platforms will be no different. Considering that these issues inundate the digital territory, one can safely say that these will be inherited in future technological platforms and applications, such as the metaverse. This means that tourists' current concerns when searching and booking traveling destinations will be magnified when the metaverse comes into play in the sector.

Furthermore, shared virtual space would also open up security problems to institutions and organizations. For hotels and restaurants, this would mean that they would have to invest in top security software, which is expensive to acquire. Failure to do this would mean that in the event of a cyber-attack, they would stand to lose a lot of money and clients to the attackers.

Another drawback that Thailand should expect is the erosion of human relationships and the concerns that locals and tourists would have over possible social and cultural impacts (Um et al., 2022, p. 55). One of the benefits of metaverse tourism is that it may enhance the benefits of social media by presenting people with a more interactive way of socializing with others online. Nevertheless, this purported benefit carries with it several concerns. The metaverse may

create new norms and customs that can destroy human behaviors existing in the real world and affect relationships created through real-life human interaction within the natural environment. For instance, most tourists who visit Thailand for its attractions learn a lot when interacting with the locals, learning their language, ways of life, and cultural beliefs. With the introduction of VR, tourists would not stand to gain such added privileges of touring Thailand. Therefore their experience would feel like a downgrade compared to the real interaction (Um et al., 2022, p. 55).

Moreover, over-reliance on the metaverse for tourism activities would make the tourists trust the software more than the workers. Worse, restaurants and hotels that do not have metaverse technologies are likely to run out of business or be forced to upgrade because it would be the only channel through which they could acquire customers. When tourists trust the software more, it will translate to them being skeptical whenever they find information on-site that was not available to them on the metaverse. Consequently, the tourists are likely to report negative feedback on the platform before seeking the help of hotel/restaurant workers.

Another concern is that tourists would raise concern over the utility and relevance of incorporating metaverse into the tourism sector. People would question whether society needs a shared virtual environment, its practical considerations when weighed against associated costs and drawbacks and whether it stands to improve or degrade human relationships. The issue with raising questions is that it makes people alert and easy to form their conclusions. When the associated industry does not address these conclusions, people tend to shy away from any association with the industry. For hotels and restaurants in Thailand, this would reflect the loss of clients and workers who want to protect their reputation.

The metaverse is a term that primarily refers to immersive and interactive online experiences that combine several aspects of virtual reality, augmented reality, social media, online gaming experiences, artificial intelligence, and the web to give people an opportunity to partake and create a virtual presence. The virtual world will allow them to interact with one another similarly to how they would in real life. Through the help of the metaverse, the virtual and physical worlds are coming together. It will be an important breakthrough because of the potential that it carries with it to break the obstacles that people in real life are facing. Today, the metaverse is the next big thing in tech, and it is only getting started. Regarding the definition of the metaverse, it is apparent that its benefits circulate the existing social media platforms and the experience that they provide so far digital communication, creating new opportunities for business enterprises, formulating a valuable virtual economy, and complementing the applications of blockchain technology. When linked to the tourism industry, metaverse tourism

and metaverse travel technology play a huge role in altering the norm between business enterprises and travelers worldwide by bridging the physical distance and offering travelers a new experience. Metaverse tourism and travel technology particularly provide opportunities to inspire their clients and provide them with valuable information that will likely increase their chances of booking hotels in Thailand.

On the other hand, the disadvantages that Thailand is likely to encounter if it adopts metaverse tourism and travel technology are detrimental. The issues associated with the internet today and criticisms hurled towards it are mainly centered on the fact that the problems have always existed and never been fully addressed by social media companies. These problems include security and privacy risks, the social and cultural impact of modern-day digital communication systems, and poor accessibility to technology. Despite the metaverse offering limitless and exciting new opportunities, the Thai state at this point appears to be inadequately equipped to handle metaverse travel and tourism technology because of the lingering dark disruptions both within and outside its borders. Nevertheless, there is always room for improvement, and Thailand stands a better chance than most countries to prepare for the unavoidable metaverse technology in its tourism industry in the future. Therefore, Thailand must address the lingering internal structural setbacks such as unequal distribution of technology and the loopholes in Thailand's cyber laws, as difficult a task as it sounds.

CONCLUSION

Despite the metaverse still being in its infancy, it is a technological advancement that will grow rapidly given the race for technological supremacy that diverse nations crave. Thailand is not left behind when it comes to technological giants, and consequently, one of the first nations in the world to embrace the metaverse blockchain. However, Thailand has a long way to go before it successfully integrates metaverse into its economic sector, especially in the tourism sector. With cyber-attacks being a common occurrence in Thailand, the tourism industry is most likely to suffer from the spread of fake news, ideologies, extremism, and the blowout of malicious content to such extreme extents that they affect the tourism rates in Thailand. Other drawbacks that Thailand is likely to face with the incorporation of metaverse include increased costs of training, decreased tourism activities for individuals in low internet connectivity areas, and high cost of digital tools, which may kick out small-scale tourism industries such as AirBnBs from the industry. All in all, most technological advancements in the world have a negative and positive effect on people's lives, and metaverse will be no exception. It affects people's lives heavily depending on how each person utilizes it. The reality

is that metaverse will follow the same path as previous inventions, and some people will use it for good intentions while others will have malicious intent. No matter what path people follow, metaverse will mark the beginning of new technology in the world's history, and people will have to embrace it sooner or later.

REFERENCES

- Buhalis, D. and Karatay, N., 2022, January. Mixed Reality (MR) for Generation Z in Cultural Heritage Tourism Towards Metaverse. In *ENTER22 e-Tourism Conference* (pp. 16-27). Springer, Cham.
- Leesa-nguansuk, S., 2021. Personal data of 106m Travellers exposed online. <https://www.bangkokpost.com>. Available at: <https://www.bangkokpost.com/business/2185963/personal-data-of-106m-travellers-exposed-online> [Accessed February 24, 2022].
- Ning, H., Wang, H., Lin, Y., Wang, W., Dhelim, S., Farha, F., Ding, J., and Daneshmand, M., 2021. A Survey on Metaverse: the State-of-the-art, Technologies, Applications, and Challenges. *arXiv preprint arXiv:2111.09673*.
- The Diplomat, 2021. Is Thailand ready for the metaverse? . *Is Thailand ready for the metaverse?* Available at: <https://fulltipshere.com/is-thailand-ready-for-the-metaverse-the-diplomat/> [Accessed February 25, 2022].
- Um, T., Kim, H., Kim, H., Lee, J., Koo, C., and Chung, N., 2022, January. Travel Incheon as a Metaverse: Smart Tourism Cities Development Case in Korea. In *ENTER22 e-Tourism Conference* (pp. 226-231). Springer, Cham.
- Wagler, A. and Hanus, M.D., 2018. Comparing virtual reality tourism to real-life experience: Effects of presence and engagement on attitude and enjoyment. *Communication Research Reports*, 35(5), pp.456-464.