PAPER NAME

# Paper ver 2.pdf

WORD COUNT

# 4983 Words

CHARACTER COUNT

# 27686 Characters

PAGE COUNT

# 11 Pages

FILE SIZE

# 215.7KB

SUBMISSION DATE

# Aug 4, 2023 7:46 PM GMT+7

REPORT DATE

# Aug 4, 2023 7:48 PM GMT+7

**Similarity Report ID:** oid:27002:40102429

15% Overall Similarity

## The combined total of all matches, including overlapping sources, for each database.

11% Internet database 0% Publications database 10% Submitted Works database

# Excluded from Similarity Report

## Bibliographic material

#### Summary

**Metaverse, Avatar and Illusion of Lawless World : Rethinking boundaries in virtual world**

Sayid Muhammad Rifki Noval1[0000-0001-8521-462x]

sayidrifqi

[125](#_bookmark52)

Pasundan University, Bandung, Indonesia

@unpas.ac.id

**Abstract**

The development of metaverse has brought great hope for many parties to be able to utilize this technological advancement. Not only within the scope of gaming, currently daily activities can also be carried out by someone in the virtual world, such as work, school and even daily life. However, metaverse also raises con- cerns for its users when avatars that represent the users can turn out to be victims of sexual harassment. This becomes a legal issue when it is committed by and to

avatars in the metaverse. The methods

were

normative juridical

ap-

with statute approach, case approach, analytical approach, and comparative

[2](#_bookmark29)used in this paper

proach, as well as research specifications using the descriptive-analytical method. It is known that currently there is no regulation that can effectively provide pro- tection for avatars in the metaverse. In fact, the efforts have been made from the plan to use the avatar creation registration system to biometric identification. However, legal instruments have not been able to fully address avatar activities that are categorized as sexual harassment in the real world although preventive efforts have been made by some parties through the Global Principles on Digital Safety or Digital Services Act issued by the EU. Therefore, it is expected that the presence of regulations can provide protection for avatars, one of which is by providing legal personality for avatars leading to the establishment of rights and obligations to its users.

**Keywords:** Avatar, Metaverse, Cyberlaw.

1. **Introduction**

After the statement of Facebook CEO, Mark Zuckerberg, regarding the mega project "Meta" that is being run and going to be developed by his company,[1] the term of metaverse becomes popular and steals the attention of people all over the world, includ- ing legal researchers. Various studies are present, ranging from issues regarding pri- vacy, data security, to jurisdictional issues because the transnational and cross-border nature of the metaverse will raise questions regarding applicable laws, jurisdictions,

and competent authorities, especially when such actions are carried out by metaverse

Metaverse is a world that transcends countries

[0](#_bookmark37)

users who hide behind avatars.[2][1](#_bookmark37)

and borders,[3] with its four main components; one of which is immersion, a technology

[10](#_bookmark37)

the boundaries between physical and virtual

that blurs

environments

al-

lows users and learners to experience a sense of immersion through AR and VR.[4] Even in its development, metaverse technology is expected to integrate real world into virtual reality,[5] which has the potential to trigger the raise of legal issues in the future. For example, the Barbados government opens a digital embassy in the metaverse[6] or the launch of a virtual campus of Muhammadiyah Cyber University based on immersive technology in October 2022.[7] The development of metaverse is believed to take place in three phases: it is started by the digital twins, and then it is continued by the digital natives, and the last is the surreality where the virtual world and the physical world have united.[8] This digital transformation strengthens the assumption that the metaverse will further reduce the boundaries of a country, especially in terms of de- mographics and geography beyond geo in geopolitics.[9]

in a way that

It is a shared knowledge that it is not easy to be able to formulate policies or regulations involving the relationship between countries, even many countries. It is a new challenge for legal researchers to conduct a study of state borders within the scope of the

[1](#_bookmark38)

eight ethical principles

[1](#_bookmark38)

metaverse, although South Korea has just attempted to introduce

authenticity, autonomy, reciprocity, respect for

which comprise of

for the metaverse

privacy, fairness, data protection, inclusion and responsibility, as an explanation of the

[2](#_bookmark51)

[4](#_bookmark51)

intact self-identity, safe enjoyment and

three values it embraces for metaverse users -

sustainable prosperity.[10] Some researchers consider that the metaverse world was born without leaving any country boundaries for its users, even firmly states the absence of borders and rules.[11] On the other hand, there are views that restrictions are still neces- sary, considering the consequences that can be experienced directly by users in the real world,[12] such as cryptocurrency theft, the sale of fake non-fungible tokens (NFTS),[13] tax evasion or tax fraud,[14] child sexual trafficking transactions,[15] extremist,[16] blackmail,[17] to potential threats in the darkverse.[18]

One of the problem faced today is the fact that smart technology has created a new space, which makes traditional laws difficult to implement, such as cross-border pay- ments using virtual currencies or assets.[19] Therefore, it is important for each country to be more careful in ensuring the traffic of technology utilization, for example, China has imposed regulations that restrict users from being able to freely explore virtual worlds hosted outside their country's borders.[20] The new space ultimately makes the metaverse can be seen separately in two different areas, that are the enforceability of human aspirations to exist in a completely virtual space, which is in some ways better than the real world, as well as a set of actual technologies that allow fact and fiction to connect.[21]

This paper attempts to study the metaverse in potentially problematic legal optics, when avatars commit acts that are considered illegal, such as sexual harassment[2](#_bookmark47)t[0](#_bookmark47)hat takes

impact

will have

This

cyberspace.

place in

study

a long-term

if in the end, avatar activ-

ities can be held legally accountable because it will lead to the next question related to which laws to be used and how the concept of restrictions in each country. Tracing the previous literature, this phenomenon resembles the rapid development of the Internet where ideas such as speculative jurisdiction[22] had become a discussion. It must be admitted that online sexual harassment has been going on for a long time in cyberspace.

[19](#_bookmark46)

A study revealed that two-thirds of adults under 30 have been harassed online.

[23]

This

behavior is known as technology-facilitated abuse or technology-assisted abuse.[24] To- day, these problems have grown with the potential threat of online sexual harassment carried out by avatars to other avatars in the metaverse, requiring critical study in find- ing solutions.

### Methods

[2](#_bookmark29)

approach, analytical approach, and comparative approach. The data used in this

normative juridical with statute approach, case

The methods used in this paper were

study

were

[17](#_bookmark44)

secondary data.

Secondary data collection was carried out through literature stud-

ies. The legal materials used were primary and secondary legal materials. Data analysis was performed with descriptive-qualitative method. The specification of this study used descriptive analytical approach

### Result and Discussion

of the literary work entitled

[1](#_bookmark42)

Snow Crash in 1992

metaverse first appeared in

The term

[5](#_bookmark42)

Neal Stephenson's

, which stands for meta-universe and is interpreted as a fictional

[4](#_bookmark31)

the metaverse as

universe.[25]

sistent, edented

Today, most researchers agree with the definition of

per-

unprec-

interoperability of data, digital items & assets, and content.

a fully functioning economy, bridging the digital and physical worlds, offering

synchronous & live, providing each user with an individual sense of “presence”,

[26] In its develop-

ment, legal researchers are working to ensure that the metaverse can run in harmony

with the existing legal order although concerns about it have been classified as part of

[18](#_bookmark45)

the three waves of technological disruption to the authority of law. This first wave of

disruption describes a situation when the national legal system forces recognition of its authority so that all decisions must be respected, especially regarding cyber technology and activities in cyberspace as in the metaverse.[27]

[22](#_bookmark49)

By 2023, there are 400 million monthly active users in the metaverse.

[28]

While in In-

[23](#_bookmark50)

in the

donesia, a study in 2022 recorded that 69% of Z Generation had an interest

their

users

metaverse.[29] In the metaverse, all individual

have

own avatar according to

the vision of metaverse that focuses on avatar-based interaction.[30] Metaverse experi- ence begins when avatar has been created and it also becomes a general requirement to

human

[6](#_bookmark43)

be able to enter the metaverse platform.[31] users in the physical world, people

[1](#_bookmark43)

Through avatars which represent

can experience activities in real-time

in various vir-

tual worlds. A user can create different avatars on different applications or games.[32]

[2](#_bookmark39)

in Hindu mythology and

[1](#_bookmark39)

used to describe the

The term of avatar itself has its roots

descent of a divine entity from

the heavenly

into the

realms

is

realm,

terrestrial

tak-

often

ing an optimized form to accomplish a specific purpose.[33]

In computing, avatars are graphical representation of users or characters or personas.

[13](#_bookmark40)

Avatars may be represented in two-dimensional forms as icons in Internet forums and

other online communities also known as profile pictures or three-dimensional forms,

[3](#_bookmark30)

such as in games or virtual worlds.[34]

Some people prefer avatars that are similar to

themselves, while others prefer their

avatars to be the ideal versions of themselves.

adopting these

higher satisfaction and attachment.

to have

reported

are

avatars

|  |  |
| --- | --- |
| Users |  |
| Users |
| not. | [35] Ch |
| metaverse. |

prefer to use avatars that have facial features

[6](#_bookmark53)

should be granted legal personality in the

similar to theirs than those that do

[2](#_bookmark53)

eong considered that an avatar

This legal personality can be granted through the registration process, in which each person only entitled to one avatar in the metaverse. This view is based on the concept of corporate law which requires registration, and it also requires other en- tities such as virtual stores to do similar registration.[36] Another idea is the concept of a biometric identity-based avatar to facilitate the verification process of its users.[37] This view is actually in line with the typology concept of digital rights that divides into three generations. The third generation is described to be consisted of the property rights owned by a new online persona, that is, a digital or virtual representation of an individual or legal entity that can exist and exercise the rights separately from the indi- vidual or legal entity who created it.[38] If this view is agreed upon, then the effort to strengthen it can refer to the interpretation of

[7](#_bookmark34)the United Nations Human Rights Council

summer

in the

2016 stating

, so avatar users need to pay attention to the rights of other avatar users

protected online

of

[7](#_bookmark34)

that the same rights people have offline must also be

when making interaction in the metaverse.[39]

Currently, avatar is considered to have a strong value because it represents a person in the real world, so crimes are possible to happen against him, such as electronic kidnap- ping of an avatar aiming to gain access to the financial system or even to commit ter- rorism.[40,41] In addition, today's advanced technology allows avatars to be easily copied and used in phishing, which is different from phishing in general.[42] However, not only the crimes against it, avatar can potentially commit illegal acts, for example, the case reported by parents who found out that their child's avatar in the roblox game was being raped by two other avatars. Some parents also reported that an avatar told their children to lie down, then the avatar also laid on it and began to move in a sexual way.[43] Dijazi stated that if an avatar makes a mistake, it needs to be understood that every

avatar activity is controlled by its user and owner so that the generalization of provi-

[21](#_bookmark48)

in the real world

sions

to activities in the virtual world can be implemented.

[44]

In line

with the view that in the spectrum of cybercrime research, there are two extreme points. First, this type of crime is a new threat and second, it is like old wine in new bottles, which means that the crime is committed in cyberspace, but with the same crime ba-

[8](#_bookmark35)

underage victims

sis.[45]

South Korea has sentenced a person to prison for persuading

post pictures and videos of their bodies on the metaverse platform. The

to film and

modus used by the perpetrator is to use [8](#_bookmark35) attract the attention of the victims.[46]

an avatar to

his age and offer gifts to

represent

Another case occurred in September 2021, when a 14-year-old girl was forced to take off her avatar clothes in the metaverse and then told to have her avatar performed sexual acts. However, South Korea still faces obstacles, as the existing regulations are limited to dealing with physical abuse of humans although it is illegal for adults to initiate sex- ual conversations with minors.[47] Another case occurred at the end of 2021 when Nina Jane Patel was playing on the horizon venue game platform. Patel logged in as a mid- dle-aged and blonde-haired avatar wearing jeans and a long-sleeved top. Patel's avatar was sexually harassed after several male avatars surrounded her, touching and groping her body. Patel asked them to stop and tried to stay away, but those avatars followed

her, continuing verbal sexual abuses. However, those avatars laughed aggressively and relentlessly, to the point of taking screenshots when they touched all over Patel's avatar. While doing that, the perpetrators even said "don't pretend you don't like it".[48] In May 2022, another survivor recounted her experience while playing Meta's Horizon Worlds VR. The victim was lured into a room by several male avatars. Once in the room, the victim's avatar was touched without her consent, as they made lewd comments and handed out bottles of alcohol in the interaction that was recorded. When her avatar was touched in the game, the victim felt her VR controller vibrate, a game feature that is intended to enhance the user's experience.[49] In an Meta app, “Population One”, Cha-

[1](#_bookmark28)

nelle Siggens was reported to be approached by another player who then simulated

groping and ejaculating onto her avatar. Another Population One user, Mari DeGrazia,

the app.

using

reported witnessing harassment more than three times per week while

One of

[50]

advantages of the

the

as other players

is the sophistication of haptic technology, a

groped her avatar's chest.

subjected to sexual

also

was

DeGrazia

abuse while wearing a VR vest,

metaverse

device that makes the user can feel the touch that seems real from the activities that occur in the environment.[51]

The panoramic view, audio, and even touch simulation provided by

[6](#_bookmark33)

can make the

frightening.

more

controller

virtual and physical

and

headset

VR

However, this technology

multi-sensory

experience, blurring the

create a

experience even

line

between

world, so it can directly attack the victim psychologically.[52]

The European Union (EU) has taken a progressive step that is planned to be imple- mented in 2023, namely the Digital Services Act which aims to establish a rule book on how Europe regulates Big Tech and Digital Landscape. The regulation provides a strong portion in providing protection to children. Through this regulation, digital ser- vice providers are required to pay attention to moderation and content management,

including illegal content, hate speech, and fake information.[53,54] Another good devel-

[4](#_bookmark41)

Global Principles on Digital Safety:

[1](#_bookmark41)

opment to appreciate is the establishment of the

in early which

2023

Translating International Human Rights for the Digital Context

emphasizes that government can distinguish between illegal and legitimate but poten- tially harmful content and distinguish appropriate regulatory actions, ensure laws and policies, respect and protect all user rights. The government must support victims and survivors of abuse or harm. Through these principles, the government needs to re-en- sure human rights that need to be protected, even if it is taking place in the metaverse world. Digital service providers must ensure that these rights are maintained on their platforms.[55] One of the company's efforts to protect its users was performed by meta which launched Personal Boundary for Horizon Worlds. A feature intended to prevent others from entering the personal space of one's avatar, making it easier to avoid un- wanted interactions. So it will be detrimental for someone who does not really under- stand about this feature.[56] Meanwhile, one of the measures taken by the government can be seen from the prosecutors in Belgium who

[5](#_bookmark32)

asked the Belgian Federal Computer

.[57] However, all of these actions do not provide optimal protection for metaverse users because harassment are still possible without legal sanctions ensnaring them.

of investigating a “virtual rape” involving a Belgian victim

Crime Unit to travel to the scene of a crime in Second Life (a VR game) for the purpose

[27](#_bookmark54)

in the

Therefore, it is necessary to reformulate the regulations that will be applied

children or sexual activities. With the impact that can be felt by the victim, the debate between the physical and virtual worlds, it seems that it is no longer fully relevant to be implemented. It is expected that the word "physical" is reinterpreted, thus reaching the criminal element of physical touch, which is often at issue in legal evidence. If a Facebook user insults in the comments of other users, does it mean that the user is an avatar who is independent of legal responsibility?. If the avatar represents a person in the real world, then a real-world protection must be applied to protect the psychological safety of everyone. Therefore, the first step that can be done is to provide a legal personality, which will include the rights and obliga- tions that must be taken care of when carrying out their activities in cyberspace. Further

metaverse, especially when it comes to

study is expected to be able to formulate the next stages related to the certainty of ju-

[8](#_bookmark55)

e-jurisdiction and metaverse grand

[2](#_bookmark55)

risdiction to implement, such as discourse about

charter of laws[58] by taking into account the concept of four layers of law, which are

the

the location

[9](#_bookmark36)

Law in the simulation; law of the simulation; law governing the simulation; and law of

that can strengthen metaverse.[59]

### Conclusion

argumentation basis of legal regulation in the

This paper aims to trigger the emergence of critical studies on the protection of avatar users in the metaverse world who experienced sexual harassment. A set of regulations and policies have been formulated and implemented, but it does not fully provide opti- mal protection guarantees. The debate over the form of avatars and physical terminol- ogy is the main element that can become the gate to the reformulation of legal protec- tion until finally, it will continue to be under the authority of the state in its regulation. The idea of providing legal personality to avatars is an interesting concept since it can expand the interpretation of the legal relationship between users and avatar owners when doing their activities in the metaverse. Moreover, further studies are needed re- garding the jurisdiction and legal sanctions that will be implemented in the metaverse world.

### References

1. Dan Milmo. (2021, October 28). *Enter the metaverse: the digital future Mark Zuck- erberg is steering us toward*. The Guardian. https[://www.](http://www.theguardian.com/tech-)th[eg](http://www.theguardian.com/tech-)u[ardian.com/tech-](http://www.theguardian.com/tech-) nology/2021/oct/28/facebook-mark-zuckerberg-meta-metaverse
2. Ali Turdialiev, M. (2022). The Legal Issues of Metaverse and Perspectives of Estab- lishment of Internasional Financial Center in Metaverse. *Innovative, Educational, Natural and Social Sciences*, *2*(8), 239–249. [www.oriens.uz](http://www.oriens.uz/)
3. Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D. P., Gustafsson, A., Hinsch, C., Jebabli, I., … Wamba, S. F. (2022). Metaverse beyond the hype:

Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *66*. https://doi.org/10.1016/j.ijinfomgt.2022.102542

1. Ng, D. T. K. (2022). What is the metaverse? Definitions, technologies and the com- munity of inquiry. *Australasian Journal of Educational Technology*, *38*(4), 190–

205. https://doi.org/https://doi.org/10.14742/ajet.7945

1. Smith, P. (2022). Black immigrants in the United States: Transraciolinguistic justice for imagined futures in a global metaverse. *Annual Review of Applied Linguistics*, *42*, 109–118. https://doi.org/10.1017/S0267190522000046
2. Kimber, M. (2021, November 17). *Barbados to launch world’s first virtual embassy in the metaverse*. Sky News. https://news.sky.com/story/barbados-to-launch- worlds-first-virtual-embassy-in-the-metaverse-12470727
3. Nugroho, A. (2022, October 6). *PP Muhammadiyah Luncurkan Kampus Virtual Si- berMU*. Cyberthreat. https://cyberthreat.id/read/14502/PP-Muhammadiyah- Luncurkan-Kampus-Virtual-SiberMU
4. Metz, D., & Gurău, M.-M. (2022). Emerging and Disruptive Technologies: The Metaverse. Implications on Global Security. *Land Forces Academy Review*, *27*(4), 411–422. https://doi.org/10.2478/raft-2022-0050
5. Dear, K. (2022). Beyond the ‘Geo’ in Geopolitics: The Digital Transformation of Power. *RUSI Journal*, *166*(6–7), 20–31. https://doi.org/10.1080/03071847.2022.2049167
6. Pessarlay, W. (2022, December 6). *South Korea’s Science Ministry unveils metaverse strategy, ethical principles for industry operators*. Coingeek. https://coingeek.com/south-korea-science-ministry-unveils-metaverse-strategy- ethical-principles-for-industry-operators/#:~:text=The%20ethical%20princi- ples%20revolve%20around,safe%20experience%2C%20and%20sustaina- ble%20prosperity.
7. Analysis and Research Team Council of the European Union. (2022). *Metaverse - Virtual World, Real Challenges*.
8. Huang, J., Sun, P., & Zhang, W. (2022). Analysis of the Future Prospects for the Metaverse. In Li. C.G, Lin. J.J, & Huang. T (Eds.), *Proceedings of the 2022 7th International Conference on Financial Innovation and Economic Development (ICFIED 2022)* (pp. 1899–1904). Atlantis Press. https://doi.org/10.2991/aebmr.k.220307.312
9. Katterbauer, K., Syed, H., & Cleenewerck, L. (2022). Financial cybercrime in the Islamic Finance Metaverse. *Journal of Metaverse*, *2*(2), 56–61.
10. Qin, H. X., Wang, Y., & Hui, P. (2022). *Identity, Crimes, and Law Enforcement in the Metaverse*. <http://arxiv.org/abs/2210.06134>
11. Muhammad Rifki Noval, S., & Jamaludin, A. (2022). Modus Operandi dan Strategi Pencegahan Kejahatan Perdagangan Seksual Anak Secara Daring. *Undang : Jurnal Hukum*, *5*(2), 419–451. https://doi.org/10.22437/ujh.5.2.419-451
12. Bajwa, A. (2022). Malevolent Creativity & The Metaverse: How The Immersive Properties Of The Metaverse May Facilitate The Spread Of A Mass Shooter Cul- ture. *The Journal of Intelligence, Conflict, and Warfare*, *5*(1), 32–52. https://doi.org/https://doi.org/10.21810/jicw.v5i2.5038
13. Guitton, M. J. (2019). Manipulation through Online Sexual Behavior: Exemplifying the Importance of Human Factor in Intelligence and Counterintelligence in the Big Data Era. *International Journal of Intelligence, Security, and Public Affairs*, *21*(2), 117–142. https://doi.org/10.1080/23800992.2019.1649122
14. Chen, Z., Wu, J., Gan, W., & Qi, Z. (2022). *Metaverse Security and Privacy: An Overview*. <http://arxiv.org/abs/2211.14948>
15. Kasiyanto, S., & Kilinc, M. R. (2022). Legal Conundrums of the Metaverse. *Jour- nal of Central Banking Law and Institutions*, *1*(2). https://doi.org/10.21098/jcli.v1i2.25
16. Xiang, N. (2022). The latest chapter of the splinternet? *East Asia Forum Quarterly*, *14*(2), 36–38. https://doi.org/10.3316/informit.522500112458762
17. van der Merwe, D. (2021). The Metaverse as Virtual Heterotopia. *3rd World Con- ference on Research in Social Sciene*, 63–73. https://doi.org/https[://www.](http://www.doi.org/10.33422/3rd.socialsciencesconf.2021.10.61)do[i.o](http://www.doi.org/10.33422/3rd.socialsciencesconf.2021.10.61)r[g/10.33422/3rd.socialsciencesconf.2021.10.61](http://www.doi.org/10.33422/3rd.socialsciencesconf.2021.10.61)
18. Tranter, K. (2011). The speculative jurisdiction: The science fictionality of law and technology. *Griffith Law Review*, *20*(4), 817–850. https://doi.org/10.1080/10383441.2011.10854722
19. Pew Research Center. (2021, January 13). *Roughly two-thirds of adults under 30 have been harassed online*. Pew Research Center. https://www.pewre- search.org/internet/pi\_2021-01-13\_online-harrasment\_0-03a/
20. Wiederhold, B. K. (2022). Sexual Harassment in the Metaverse. In *Cyberpsychol- ogy, Behavior, and Social Networking* (Vol. 25, Issue 8, pp. 479–480). Mary Ann Liebert Inc. https://doi.org/10.1089/cyber.2022.29253.editorial
21. Haron, H. H., & Arsat, N. (2022). Zuckerberg’s Metaverse and the Unready Ma- laysian Laws: Quo Vadis? *Proceedings of the International Conference on Law and Digitalization (ICLD 2022)*, 123–135. https://doi.org/10.2991/978-2- 494069-59-6\_12
22. Henz, P. (2022). The societal impact of the metaverse. *Discover Artificial Intelli- gence*, *2*(1). https://doi.org/10.1007/s44163-022-00032-6
23. Brownsword, R. (2022). Law, authority, and respect: three waves of technological disruption. *Law, Innovation and Technology*, *14*(1), 5–40. https://doi.org/10.1080/17579961.2022.2047517
24. Mileva, G. (2023, January 4). *52 Metaverse Statistics | Market Size & Growth (2023)*. Influencer Marketing Hub. https://influencermarketing- hub.com/metaverse-stats/
25. Statistika. (2022, May 30). *Di kala Dunia Menuju Teknologi Metaverse*. Open Data Jabar. https://opendata.jabarprov.go.id/id/infografik/di-kala-dunia-menuju- teknologi-metaverse
26. Zimmermann, D., Wehler, A., & Kaspar, K. (2022). Self-representation through avatars in digital environments. *Current Psychology*. https://doi.org/10.1007/s12144-022-03232-6
27. Jang, J., & Kim, J. (2023). Exploring the Impact of Avatar Customization in Metaverse: The Role of the Class Mode on Task Engagement and Expectancy- Value Beliefs for Fashion Education. *Mobile Information Systems*, *2023*, 1–13. https://doi.org/10.1155/2023/2967579
28. Braud, T., Zhou, P., Lee, L.-H., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2021). All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda. *Journal of Latex Class Files*, *14*(8), 1–60. https://doi.org/10.13140/RG.2.2.11200.05124/8
29. Nagendran, A., Compton, S., Follette, W. C., Golenchenko, A., Compton, A., & Grizou, J. (2022). Avatar led interventions in the Metaverse reveal that interper- sonal effectiveness can be measured, predicted, and improved. *Scientific Reports*, *12*(1). https://doi.org/10.1038/s41598-022-26326-4
30. Moro-Visconti, R. (2022). From physical reality to the Metaverse: a Multilayer Network Valuation. *Journal of Metaverse*, *2*(1), 16–22. https://dergipark.org.tr/en/pub/jmv/issue/67967/1071950
31. Park, S., Kim, S. P., & Whang, M. (2021). Individual’s social perception of virtual avatars embodied with their habitual facial expressions and facial appearance. *Sensors*, *21*(17). https://doi.org/10.3390/s21175986
32. Cheong, B. C. (2022). Avatars in the metaverse: potential legal issues and remedies. *International Cybersecurity Law Review*, *3*(2), 467–494. https://doi.org/10.1365/s43439-022-00056-9
33. Huang, H., Zhang, Q., Li, T., Yang, Q., Yin, Z., Wu, J., Xiong, Z., Zhu, J., Wu, J., & Zheng, Z. (2022). *Economic Systems in Metaverse: Basics, State of the Art, and Challenges*. <http://arxiv.org/abs/2212.05803>
34. Noval, S. M. R., Soecipto, & Jamaludin, A. (2022). *Perlindungan Hak Digital An- caman Privasi di Tengah Serangan Social Engineering*. PT RajaGrafindo Per- sada.
35. Bojic, L. (2022). Metaverse through the prism of power and addiction: what will happen when the virtual world becomes more attractive than reality? In *European Journal of Futures Research* (Vol. 10, Issue 1). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1186/s40309-022-00208-4
36. Kostenko O. V. (2022). Electronic Jurisdiction, Metaverse, Artificial Intelligence, Digital Personality, Digital Avatar, Neural Networks: Theory, Practice, Perspec- tive. *World Science*, *1(73)*. https://doi.org/10.31435/rsglobal\_ws/30012022/7751
37. Debuire, D. (2022, April 12). *Terrorist use of the metaverse : New opportunities and new challenges*. The Security Distillery. https://thesecuritydistillery.org/all- articles/terrorism-and-the-metaverse-new-opportunities-and-new-challenges
38. Huang, Y., Li, Y. J., & Cai, Z. (2023). Security and Privacy in Metaverse: A Com- prehensive Survey. *Big Data Mining and Analytics*, *6*(2), 234–247. https://doi.org/10.26599/bdma.2022.9020047
39. Rachel Stonehouse. (2019, May 30). *Roblox: “I thought he was playing an innocent game.”* Bbc. https[://www.](http://www.bbc.com/news/technology-48450604)bb[c.co](http://www.bbc.com/news/technology-48450604)m[/news/technology-48450604](http://www.bbc.com/news/technology-48450604)
40. Dizaji, A., & Dizaji, A. (2023). Metaverse and its Legal Challenges. *Synesis*, *15*(1), 138–151.
41. Mackenzie, S. (2022). Criminology Towards the Metaverse: Cryptocurrency Scams, Grey Economy and the Technosocial. *The British Journal of Criminol- ogy*, *62*(6), 1537–1552. https://doi.org/10.1093/bjc/azab118
42. Park, D. (2022, September 12). *S.Korean man sentenced to four years for sexual abuse in metaverse*. Forkast. https://forkast.news/headlines/skorea-man-four- years-sexual-abuse-metaverse/
43. Park, D. (2022, February 18). *South Korea struggles to prevent sexual harassment of minors in the metaverse*. Forkast. https://forkast.news/south-korea-sexual-har- assment-minors-metaverse/
44. Clayton, M. (2022, January 29). *Mother says she was virtually groped by three male characters within seconds of entering Facebook’s online world Metaverse*. Daily Mail. https[://www.](http://www.dailymail.co.uk/news/article-10455417/Mother-43-avatar-)d[aily](http://www.dailymail.co.uk/news/article-10455417/Mother-43-avatar-)m[ail.co](http://www.dailymail.co.uk/news/article-10455417/Mother-43-avatar-).[uk/news/article-10455417/Mother-43-avatar-](http://www.dailymail.co.uk/news/article-10455417/Mother-43-avatar-) groped-three-male-characters-online-Metaverse.html
45. Singh, K. (2022, June 10). *There’s Not Much We Can Legally Do About Sexual Assault In The Metaverse*. Refinery29. https[://ww](http://www.refinery29.com/en-)w.r[efinery29.com/en-](http://www.refinery29.com/en-) us/2022/06/11004248/is-metaverse-sexual-assault-illegal
46. Diaz, A. (2022, May 27). *Disturbing reports of sexual assaults in the metaverse: ‘It’s a free show.’* New York Post. https://nypost.com/2022/05/27/women-are- being-sexually-assaulted-in-the-metaverse/
47. Divya Jyothi, B., & Krishnaiah, R. v. (2013). Haptic Technology - A Sense of Touch. *International Journal of Science and Research*, *2*(9). [www.ijsr.net](http://www.ijsr.net/)
48. Le, T. (2022, July 22). *Sexual assault in the metaverse is part of a bigger problem that technology alone won’t solve*. Monash University. [https://lens.monash.edu/@politics-society/2022/07/22/1384871/sexual-assault-](https://lens.monash.edu/%40politics-society/2022/07/22/1384871/sexual-assault-) in-the-metaverse-theres-nothing-virtual-about-it
49. Vosloo, S. (20233, June 20). *EU Digital Services Act: How it will make the internet safer for children*. World Economic Forum. https://www.wefo- rum.org/agenda/2022/06/eu-digital-service-act-how-it-will-safeguard-children- online/
50. Sum Of Us Team. (2022). *Metaverse: another cesspool of toxic content*. https[://www.](http://www.vox.com/recode/22933851/me-)vox[.com/recode/22933851/me-](http://www.vox.com/recode/22933851/me-)
51. The World Economic Forum’s Global Coalition for Digital Safet. (2023). *Global Principles on Digital Safety: Translating International Human Rights for the Digital Context*. https://www3.wefo- rum.org/docs/WEF\_Global\_Charter\_of\_Principles\_for\_Digital\_Safety\_2023.pd f
52. Sanasie, J. (2022, May 28). *What Happens if You’re Sexually Assaulted in the Metaverse?* Coin Desk. https[://www.](http://www.coindesk.com/layer2/metaver-)co[in](http://www.coindesk.com/layer2/metaver-)d[esk.com/layer2/metaver-](http://www.coindesk.com/layer2/metaver-) seweek/2022/05/27/what-happens-if-youre-sexually-assaulted-in-the-metaverse/
53. Agrawal, harsh, & Jain, R. (2022). *Expounding the Contours of Sexual Harassment in Virtual Reality: Applicability of the Penal Laws to State-of-the-Art Technol- ogy*. https://rmlnlulawreview.com/2022/05/20/metaverse/
54. Kostenko, O., Furashev, V., Zhuravlov, D., & Dniprov, O. (2022). Genesis of Legal Regulation Web and the Model of the Electronic Jurisdiction of the Metaverse. *Bratislava Law Review*, *6*(2), 21–36. https://doi.org/10.46282/blr.2022.6.2.316
55. Woon, A. (2022, January 25). The metaverse is not above real-world law. *The Straits Times*, 20–20. https[://www.](http://www.suss.edu.sg/docs/default-source/media-cover-)sus[s.edu.sg/docs/default-source/media-cover-](http://www.suss.edu.sg/docs/default-source/media-cover-) age/20220125-st---the-metaverse-is-not-above-real-world- law.pdf?sfvrsn=5f6655cb\_0

# 15% Overall Similarity

## Top sources found in the following databases:

11% Internet database 0% Publications database 10% Submitted Works database

#### TOP SOURCES

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

# [nypost.com](https://nypost.com/2022/05/27/women-are-being-sexually-assaulted-in-the-metaverse/amp/) 1%

[**1**](#_bookmark21)

Internet

# [bircu-journal.com](http://bircu-journal.com/index.php/birci/article/download/2132/pdf) 1%

[**2**](#_bookmark1)

Internet

# Kingston University on 2021-12-17 1%

[**3**](#_bookmark16)

Submitted works

# [link.springer.com](https://link.springer.com/article/10.1007/s44163-022-00032-6?code=7d1c4c1c-a123-4fbb-a18a-31b9e3cc24ac&error=cookies_not_supported) 1%

[**4**](#_bookmark9)

Internet

# [rmlnlulawreview.com](https://rmlnlulawreview.com/2022/05/20/metaverse/) 1%

[**5**](#_bookmark24)

Internet

# [miragenews.com](https://www.miragenews.com/sexual-assault-in-metaverse-is-part-of-bigger-824187/)

[**6**](#_bookmark22)

#### Internet

<1%

# [eujournalfuturesresearch.springeropen.com](https://eujournalfuturesresearch.springeropen.com/counter/pdf/10.1186/s40309-022-00208-4.pdf)

[**7**](#_bookmark18)

#### Internet

<1%

# [finance.yahoo.com](https://finance.yahoo.com/news/korean-man-sentenced-four-years-041439436.html)

[**8**](#_bookmark20)

#### Internet

<1%

# Anglo American University on 2022-05-26

[**9**](#_bookmark27)

#### Submitted works

<1%

Sources overview

# [researchonline.ljmu.ac.uk](https://researchonline.ljmu.ac.uk/id/eprint/17243/1/IJIM.pdf)

[**10**](#_bookmark2)

#### Internet

<1%

# [yahoo.com](https://www.yahoo.com/now/south-korea-sentences-man-4-222447715.html)

[**11**](#_bookmark3)

#### Internet

<1%

# [nature.com](https://www.nature.com/articles/s41598-022-26326-4?code=be08d606-9b21-47d2-9693-444e25eb2696&error=cookies_not_supported)

[**12**](#_bookmark14)

#### Internet

<1%

# [wikimili.com](https://wikimili.com/en/Sindome)

[**13**](#_bookmark15)

#### Internet

<1%

# [www3.weforum.org](https://www3.weforum.org/docs/WEF_Global_Charter_of_Principles_for_Digital_Safety_2023.pdf)

[**14**](#_bookmark23)

#### Internet

<1%

# Taylor’s Education Group on 2023-07-17

[**15**](#_bookmark8)

#### Submitted works

<1%

# University of Auckland on 2021-10-27

[**16**](#_bookmark13)

#### Submitted works

<1%

# [grafiati.com](https://www.grafiati.com/en/literature-selections/tax-conciliation/)

[**17**](#_bookmark7)

#### Internet

<1%

# [jcli-bi.org](https://www.jcli-bi.org/index.php/jcli/article/download/25/15)

[**18**](#_bookmark10)

#### Internet

<1%

# [pewresearch.org](https://www.pewresearch.org/internet/pi_2021-01-13_online-harrasment_0-03a/)

[**19**](#_bookmark6)

#### Internet

<1%

# Universidad Carlos III de Madrid on 2023-01-23

[**20**](#_bookmark5)

#### Submitted works

<1%

# [dokumen.pub](https://dokumen.pub/research-handbook-on-the-law-of-virtual-and-augmented-reality-1786438585-9781786438584.html)

[**21**](#_bookmark19)

#### Internet

<1%

**Similarity Report ID:** oid:27002:40102429

Sources overview

# Instituto de Empress S.L. on 2023-05-02

[**22**](#_bookmark11)

#### Submitted works

<1%

# King's College on 2023-01-09

[**23**](#_bookmark12)

#### Submitted works

<1%

# Lincoln High School on 2022-11-29

[**24**](#_bookmark4)

#### Submitted works

<1%

# Pasundan University on 2021-08-21

[**25**](#_bookmark0)

#### Submitted works

<1%

# Ravensbourne on 2023-01-25

[**26**](#_bookmark17)

#### Submitted works

<1%

# Sim University on 2023-04-11

[**27**](#_bookmark25)

#### Submitted works

<1%

# [scilit.net](https://www.scilit.net/container-group-articles?q=container_group_id%3A%2824808%29&sort=Newest)

[**28**](#_bookmark26)

#### Internet

<1%

#### Sources overview