

Discussion on issues related to "Metaverse" and competition law

Abstract

Key Words: metaverse, Fair Trade Law, competition law, digital economy, digital market

The metaverse is a realm where everything that happens in reality can be conducted in an online virtual world. It is not just about playing online games or browsing the internet; activities in the metaverse might influence users' real lives, thereby blurring the boundaries between virtual online life and reality. The metaverse operation involves combining various technologies, such as AR, VR, MR, and even brain-machine interfaces, 5G/6G networks, AI algorithms, cloud computing, and blockchain. Current applications of metaverse technology can be seen in video games, education, improving industrial and commercial productivity and workplace safety, various social entertainment activities, telemedicine, and more, with the most widespread being video games. Other applications like education, healthcare, and commerce are limited due to the early stages of related technology and hardware development.

Currently, no specific laws in mainstream countries regulate the metaverse. Given the robust connectivity between the metaverse and major digital platforms, this research, from a comparative legal perspective, not only explores the policies of mainstream countries towards metaverse regulations but also compares the regulatory frameworks of major digital platforms. The leading digital platform operators in the market are from the US and Mainland

China, with fewer from the EU. The EU has been the most proactive in establishing related digital platform anti-monopoly norms to maintain the competitive order of digital platforms within the EU market. The EU imposes various obligations on large digital platforms within its jurisdiction through digital market regulations, with corresponding penalties. In contrast, the US and Mainland China regulate emerging digital platform industries through traditional antitrust laws. However, their legislative strategies differ: China's regulations are directly issued by administrative departments, while the US proposes regulatory bills after Congress investigates the digital platform industry.

When defining the metaverse industry market using competition law, traditional demand substitution methods cannot be used alone because digital economies' focal points and profit models differ from traditional markets. For a correct market definition, one must observe the industry's business model, profit methods, and the effects on consumers in the market to find suitable criteria. When assessing market power, factors include the enterprise's market share, market influence, and consumer substitutability. Especially in the digital industry and the metaverse emphasizing connectivity and feedback, the focus should be on the diffusion of network effects, consumer habits, and user density in related services to accurately assess whether an enterprise has achieved a dominant market position.

According to investigations by the EU Competition Committee, digital market competition shows characteristics of market concentration and a "winner-takes-all" dynamic due to network effects, consumer lock-in, and economies of scale and scope. This applies to the competitive environment of the metaverse as well. Main competition law issues in the metaverse industry

involve abuse of market or platform positions, corporate mergers, unfair product or service linkage, and other unfair competitive behaviours involving intellectual property rights. Existing competition laws should apply to interactions within the metaverse industry. However, the regulatory standards should vary depending on the metaverse's future development stages or models. Whether it is monopolistic, combined, or collusive anti-competitive behaviour, the goal of regulation or prohibition by authorities is to maintain market order, promote fair industry competition, and protect consumer rights. Only when combinations or collaborations in the metaverse's hardware and software industries lead to market blockages, reduced consumer choices, or the abuse of market positions to squeeze potential competitors is there a necessity for legal regulation? Otherwise, premature intervention could hinder industry development.

Regarding the division of labour between competition law and financial authorities, current practices of the Financial Supervisory Commission and international regulation focus on "anti-money laundering" and "financial products" when regulating cryptocurrencies and NFTs. The FAFT has provided guidelines, but each country's anti-money laundering authority still primarily carries out law enforcement. For the regulation of financial products, both the US and our country have established main axes managed by financial authorities for cryptocurrencies; for NFTs, due to their undefined nature, regulatory authorities worldwide are still observing, but the tendency is to have financial authorities as the primary managing bodies. Additionally, the legal positioning of virtual avatars, which is becoming increasingly relevant due to the rise of the metaverse concept, is also an area where unfair competition may occur. This is because virtual avatars have become an

integral part of the metaverse concept, and they are a combination of various data and are closely linked to real-world individuals. When future metaverse enterprises possess or manage more virtual avatar data, these enterprises can restrict consumer choices due to network effects. With their vast data and user count, they might engage in unfair competitive behaviour. This will be a point of interest for the Fair Trade Commission in the future and an area where regulations need further refinement.

The development of the metaverse market has yet to mature, and many in the industry assess that it will take several years for the metaverse to have a more complete form and mature technical applications. Therefore, only then might we get a full view of the metaverse market. Consequently, the metaverse is an ever-evolving concept. Given that laws inherently lag, it is inappropriate to hinder the development of the industry with legislation or to regulate, leading to market failures hastily. Both domestic and foreign legislative examples mainly regulate established large digital platforms. Referring to foreign legislative research and investigation reports, there is no immediate need to legislate the metaverse. Comprehensive regulations for the metaverse market can be compiled after the market matures. By then, the market will have matured. When defining the market and assessing market power, regulatory authorities can exclude excessive speculations and assumptions and modify the laws based on mature business models and market structure. This will minimize the impact of new regulations on the market and preserve the potential for the market's free development.

As for the competition law issues that have already emerged, regulatory authorities can attempt to regulate them using existing competition and business management laws. Suppose certain behaviours do not quite fit the

current regulations. In that case, they can supplement that part (for example, by making partial amendments to specific provisions or by slightly expanding the scope of administrative regulations through administrative interpretations). Alternatively, they can use internal handling guidelines, case handling methods, or amendments to the implementation rules of regulations to fill in the gaps without spending time amending an entire legal code. Therefore, at this time, the regulatory authorities should prioritize applying existing laws to address competition law issues in the metaverse market that have already emerged. If there are deficiencies in the current laws, they should be supplemented and amended using the methods mentioned above. Once the metaverse market matures, comprehensive regulatory statutes can be formulated and promulgated. This approach can balance market development needs and the maintenance of a fair, competitive environment.