



# Analysis and Suggestions on the Legal Protection Dilemma of Online Virtual Property: A Case Study of China

Wenchi Wu<sup>1</sup>, Mengyi Shi<sup>1,\*</sup> and Xingping Nie<sup>2</sup>

<sup>1</sup>School of Law, Guangzhou College of Commerce, Guangzhou 511363, China

<sup>2</sup>School of Accounting, Guangzhou College of Commerce, Guangzhou 511363, China

## Abstract

With the wide application and rapid development of the Internet, online virtual property has become an important form of asset, and its protection has attracted more and more attention. At present, there are many deficiencies in the legal protection of online virtual property in China, whether it is legislative, judicial or administrative supervision, and it needs to be improved urgently. This paper first discusses the legal attributes of online virtual property, and analyzes the significance of legal protection of online virtual property based on survey data. Subsequently, the main problems in legal protection in this field in China were analyzed, and some suggestions for improvement were put forward, such as establishing legal status, improving laws and regulations, strengthening supervision and enhancing public awareness. These suggestions aim to build a sound legal protection system for online virtual property and promote its healthy and orderly development.

**Keywords:** cyber virtual property, legal attributes, legal protection, legal status, degree of supervision.

## 1 Introduction

In recent years, China's Internet industry has developed rapidly, and the development of intelligence advances by leaps and bounds. The scale of all aspects of the online virtual property is constantly expanding, and the number of disputes related to it is also showing an increasing trend of [1]. Network virtual property has gradually developed into a new form of popular trading on Internet platforms, and become an indispensable and important form of property in human life, which challenges the existing legal related issues. The Civil Code issued in 2020 only stipulates the general principle of online virtual property, but has no specific provisions on its legal attributes, scope that should be protected by law, value estimation, ownership of rights, burden of proof and other aspects. In judicial practice, the principle rules to solve the related case dispute effect is not obvious, therefore, the related problems of the process of research and analysis, improve the civil legal protection system of network virtual property, continue to strengthen the legal protection to protect the network virtual property



Submitted: 18 March 2025

Accepted: 29 May 2025

Published: 17 July 2025

Vol. 2, No. 3, 2025.

10.62762/JSSPA.2025.232129

\*Corresponding author:

✉ Mengyi Shi

shimengyide@163.com

## Citation

Wu, W., Shi, M., & Nie, X. (2025). Analysis and Suggestions on the Legal Protection Dilemma of Online Virtual Property: A Case Study of China. *Journal of Social Systems and Policy Analysis*, 2(3), 105–110.



© 2025 by the Authors. Published by Institute of Central Computation and Knowledge. This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>).

to better maintain network space order and the legitimate rights and interests of the parties, to expand the scale of virtual property industry development to build the rule of law management environment.

## 2 The legal attribute of the Internet virtual property

As the product of the information age, the network virtual property is one with the value of traditional property and convenient circulation attribute [2]. Network virtual property exists in the network space in the form of digitalization, and has the virtual nature, which is the fundamental difference between its existence and the traditional property. Although it is virtual, it also has real economic value. User input, market needs, platform operation rules and other factors are its value sources, so it has value. When using a network platform or software, users can process and manipulate their virtual property, being disposable. At the same time, users must comply with the relevant laws and regulations on the basis of the legitimate rights and interests of others and not infringe on the network virtual property, with legal requirements. Network virtual property also has the virtual, value, disposable, legitimacy and other legal attributes, which not only reflects the necessity of its legal protection, but also ushered in a new round of problems and tests. In the digital era, it is an important problem for the legal community to more reasonably and effectively protect the network virtual property and safeguard the legitimate rights and interests of Chinese netizens.

## 3 Value and significance of the research

### 3.1 The reasonable need to improve the civil law system

In the past five years, the type and number of virtual property on the Internet have increased, and the number of related legal cases has increased significantly [3]. The protection of the current civil law system for virtual property is still insufficient, so it is urgent to solve various disputes caused by the legal protection of network virtual property, so as to deal with the problems between the rapid development of network virtual property and the lag of law, so as to better maintain the stability and harmony within China's civil law system. At present, Article 127 of the Civil Code stipulates: "If the law has provisions on the protection of data and online virtual property, such provisions shall apply." It can be seen that this clause does not make detailed provisions on other aspects of

the network virtual property. Because there are still some relevant guiding provisions of the current law, this paper studies and analyzes the relevant issues, hoping to help China's network virtual property cases reflect better legal benefits in judicial practice, improve and maintain the rigor and authority of the legal system, and improve the relevant legal system.

### 3.2 Realistic needs for protecting the legitimate rights and interests of the right holders

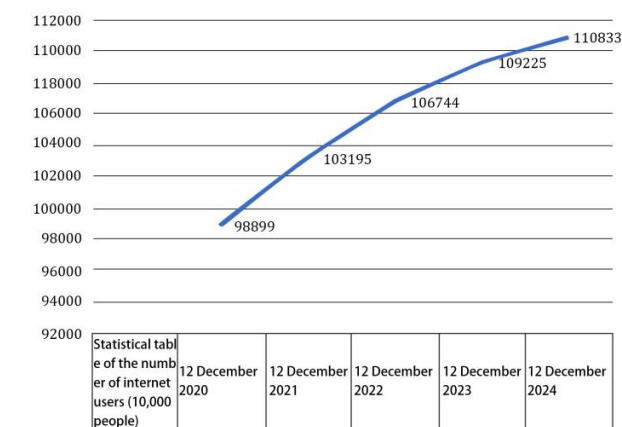


Figure 1. Statistical of the number of Netizens from 2020 to 2024 (10,000).

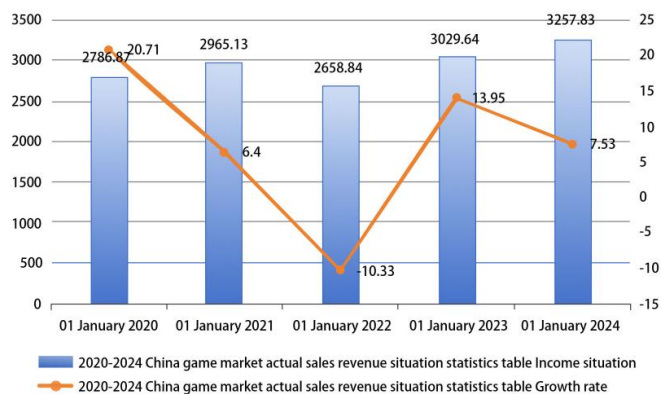
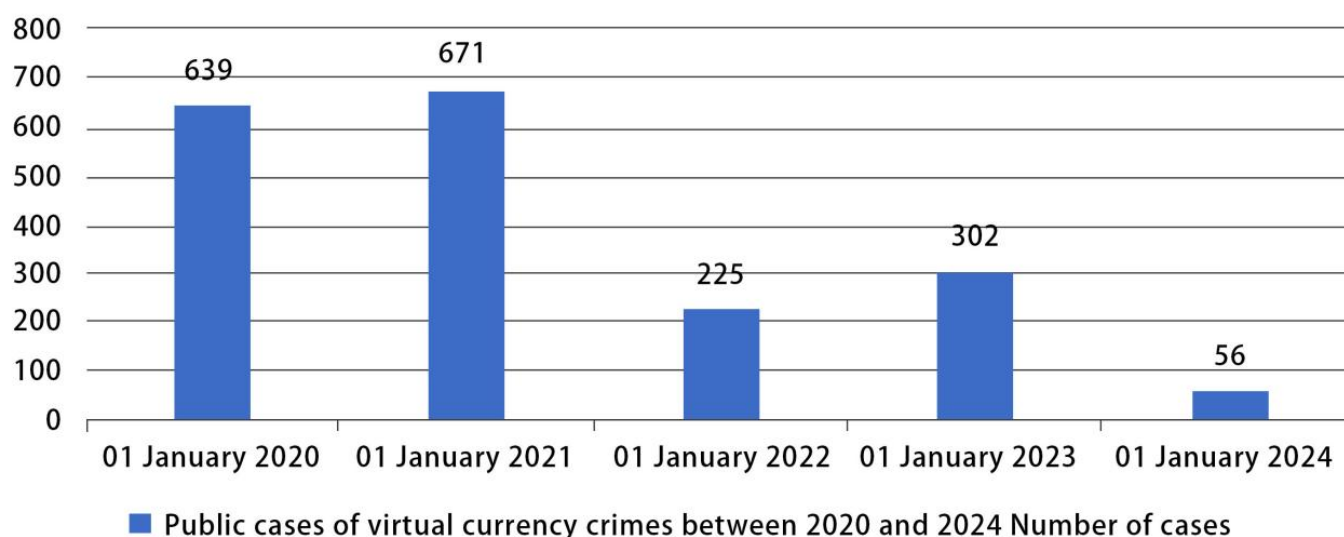


Figure 2. Statistical of actual sales revenue and growth of China's game market from 2020 to 2024.

The above data sources: China Internet Network Information Center (CNNIC), The Game Working Committee of China Audio and Digital Association (GPC)

In the past five years, with the continuous growth of the scale of Chinese Internet users (see Figure 1), the proportion of online virtual property in people's property is also increasing. Network virtual property refers to the valuable virtual goods created or acquired by users on the Internet, covering a wide variety of products, including games, social platforms, and other

## Public cases of virtual currency crimes between 2020 and 2024 Number of cases



**Figure 3.** Number of public cases related to virtual currency crimes from 2020 to 2024.

Internet services. Take online games as an example, the game account not only represents the investment and emotion of players, but also the game currency can be used to purchase props or conduct transactions, while rare equipment and pets become the main objects of inter-player transaction [4] because of their high transaction value. The expansion of online game users in China and the growth trend of actual sales revenue in the game market (see Figure 2) fully reflect the huge market size of virtual property, especially virtual game property. With the continuous development of the digital network era, the scale progress of all aspects of virtual property has been expanded to [5]. Therefore, in order to better protect the property safety of the right holders, it is urgent to improve the relevant legal system and technical means, to provide users with a more secure and reliable network environment.

### 4 Main problems facing the legal protection of network virtual property in China

#### 4.1 The legal attribute is not clearly defined

As the legal attribute of the network virtual property has not been clearly defined, in judicial practice, the courts and relevant departments often fall into the

dilemma of dealing with the disputes related to the network virtual property, and the judgment results also lack of unity and predictability.

#### 4.2 There are gaps in laws and regulations

In order to understand the trial of criminal cases involving virtual currency in judicial practice, this paper will use the statistical analysis method of judgment to conduct statistics and analysis of relevant practical cases. At the same time, the relevant data will be presented in a table form for typed comparison. With "virtual currency", "criminal" and "first-instance judgment book" as the key words, this search searched the nationwide public cases related to virtual currency crimes from 2020 to 2024 through the alpha legal database, and a total of 2,206 judgment documents were retrieved. The annual distribution of these cases is shown in Figure 3, and the regional distribution across various provinces is presented in Figure 4.

Among the 2,206 criminal cases involving virtual currency that were classified, Hunan province had the most involved cases, followed by Henan province and Zhejiang Province, followed by Fujian province and Guangdong Province. It can be seen that Henan

Province, the Pearl River Delta region and the Yangtze River Delta region are all the high incidence of criminal cases involving virtual currency.

Existing laws and regulations for the protection of network virtual property blank, there is no special law to regulate, only the civil code of the People's Republic of China in article one hundred and twenty-seven, for the first time provides the network virtual property protection principle, but no specific protection measures, which makes the rights and interests of network virtual property protection in the legal level is weak. In addition, the lack of effective supervision of the network virtual property trading platform, leading to fraud, false transactions and other non-standard behaviors in the transaction process, which damage the interests of users and disrupt the market order [6].

#### **4.3 Relief access is limited**

When users suffer losses in the network virtual property, the existing relief ways are relatively limited, and the lack of effective non-litigation solution mechanism, such as mediation, arbitration, etc. The particularity of its property attribute makes the criminal investigation of infringing the network virtual property have insurmountable obstacles, which leads to the difficulties of safeguarding the rights of the network virtual property.

### **5 Countermeasures and suggestions to improve the legal protection of network virtual property in China**

#### **5.1 Clarifying the legal status of network virtual property**

The legal status of the network virtual property is the key to ensure the effective protection of its rights and interests. At present, China has not yet carried out specific legal norms on the network virtual property, which leads to great uncertainty in the dispute resolution and rights and interests protection. Therefore, it is urgent to clarify the legal attribute of the network virtual property through legal means, and clearly position it as a new type of property rights and interests. one side, Can be clarified through legislation, Suggfor special laws, Clarifying the definition, nature, rights and obligations of network virtual property, Standardize its trading behavior, Clarify its position in the legal system, This helps to build a legal framework for online virtual property, Provide a clear legal basis for their rights and interests, To make it more secure in its protection at the

legal level; on the other hand, It is also a feasible way to be clear through judicial interpretation, The relevant judicial body may issue an interpretation, Clarifying the legal attributes and relevant legal relationships of network virtual property, Provide guidance for judicial practice, This approach is relatively flexible, Can more timely adapt to the development and change of the network virtual property market [7]. Clarifying the legal status of network virtual property can not only help to reduce the uncertainty of judicial judgment, but also can provide clearer legal rules for market subjects, and promote their standardized operation and legal transactions. Such legal clarity will provide strong support for the healthy development of the network virtual property, enhance market confidence, attract more investment and participants, and promote the healthy growth of the network virtual property market.

#### **5.2 Improve the system of protection of network virtual property**

Network virtual property has become widely prevalent in practice, yet existing laws and regulations lack detailed provisions to safeguard its development and promote healthy market growth [11]. Therefore, to effectively promote the development of network virtual property, which is presented in the form of data, it is necessary to improve relevant institutional regulations based on the provisions of the Civil Code. First, specific institutional regulations should clearly define the nature and scope of network virtual property, explicitly categorizing game accounts and social media accounts as part of network virtual property [13], establishing the legal status of such data, thereby better defining the scope of network virtual property and clarifying its specific content. Second, the ownership of network virtual property should be clearly defined. Within specific institutional norms, the rights holders for ownership, usage, and disposal of network virtual property should be clearly identified [14], providing effective legal protection for the rights and interests of network virtual property, while also effectively reducing conflicts and disputes in transactions, facilitating smooth and stable trading. Third, supervision of network virtual property trading platforms should be strengthened to prevent and mitigate transaction risks. By improving regulatory measures, ensure that relevant trading platforms operate legally, compliantly, and reasonably, effectively preventing and mitigating transaction risks. At the same time, through risk prediction, education, and warnings on trading platforms, guide relevant trading entities to invest and

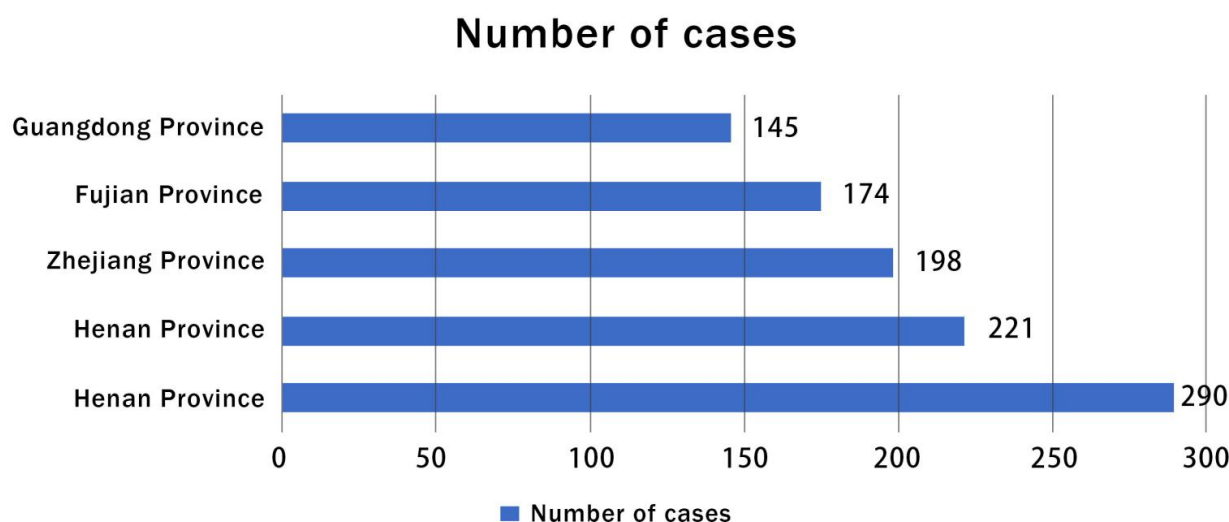


Figure 4. The number of cases in some provinces.

trade rationally, reasonably avoiding potential risks. Finally, the transaction process of network virtual property should be reasonably regulated. Through clear procedural arrangements, transactions can be conducted legally, reasonably, and orderly, ensuring fairness and reasonableness. This guarantees the predictability of online virtual property transactions, providing clearer, more explicit, and stronger legal protection for such properties [15]. It promotes healthy and orderly development within the framework of the rule of law. This will boost market participants' confidence and contribute to the sustainable prosperity of the industry.

### 5.3 Strengthen supervision and crack down on crimes of online virtual property

The protection of network virtual property needs a comprehensive use of legal means and regulatory means to effectively crack down on all kinds of illegal behaviors. In order to ensure the legal and healthy development of the network virtual property market, China is urgent to establish a more sound network virtual property supervision system [8]. First, strengthening the supervision of the network virtual property trading platform is a key link. The regulatory authorities shall formulate clear rules and regulations, and conduct detailed supervision on the registration, operation and capital flow of the platforms to ensure their legal and compliant operation. It is suggested to establish a regular review mechanism, conduct a comprehensive review of the operation of the platform, and timely find and solve the potential risks. Second, strengthening law enforcement is the key to crack down on network virtual property crimes. Law enforcement organs shall intensify the crackdown on

violations of the rights and interests of online virtual property and investigate the criminal responsibility. It is suggested to establish a special law enforcement team for network virtual property crimes to improve the efficiency of cracking down on network virtual property crimes. Third, to formulate more explicit laws and regulations to define and punish online virtual property crimes, so as to reduce the cost of illegal activities and improve the deterrence of the law [9].

### 5.3 Improve the public's awareness and awareness of the legal protection of online virtual property

The public's understanding and awareness of the legal protection of the network virtual property is the basis of the protection work [12]. In order to improve the public's cognition level of the legal protection of network virtual property, China needs to adopt various ways for publicity and education. First, Legal knowledge popularization activities can be organized in schools, enterprises, public institutions and communities, Through lectures, training, brochures and other forms, To introduce to the public the legal status of online virtual property, the measures to protect its rights and interests, and the coping methods when encountering problems, This helps to improve the public's understanding and recognition of the regulations; second, Online dissemination of legal knowledge through Internet platforms, Through social media, legal promotion sites and other on, Spread of legal knowledge of online virtual property, Answer questions of public concern, Improve the perception of the majority of regulations; third, Suggestions to increase the publicity of the rule of law, Publicize the successful cases and typical

disputes of the legal protection of network virtual property, Through vivid and concrete cases, To guide the public to correctly understand and use the weapons of law, Improve the public awareness of the network virtual property legal protection and self-protection ability [10].

## 6 Conclusion

Through deeply studying the legal protection of network virtual property in China, this paper puts forward a series of targeted countermeasures and suggestions. Clarifying the legal status of network virtual property is the top priority, which will provide the basis for subsequent legislation and judicial practice. At the same time, improving the relevant laws and regulations and strengthening the supervision are also indispensable measures to ensure the security and order of the network virtual property. In addition, improving the public's awareness and awareness of the legal protection of online virtual property is an important link to promote the healthy development of this field. The implementation of these countermeasures and suggestions will help to facilitate the establishment and improvement of the legal protection system of network virtual property in China, and provide strong support for the healthy development of network virtual property.

## Data Availability Statement

Data will be made available on request.

## Funding

This work was supported without any funding.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Ethical Approval and Consent to Participate

Not applicable.

## References

- [1] Glushko, B. (2007). Tales of the (virtual) city: governing property disputes in virtual worlds. *Berkeley Tech. LJ*, 22, 507.
- [2] Yin, Z. Y., Huang, A. M., & Huang, Z. Y. (2024). Virtual tourism attributes in cultural heritage: Benefits and values. *Tourism Management Perspectives*, 53, 101275. [Crossref]
- [3] Zhao, Y., & Chen, H. (2024). Enhancing access to digital justice: digital governance of dispute resolution and dispute prevention in online commercial activities. *Journal of International Dispute Settlement*, 15(2), 273-304. [Crossref]
- [4] Wang, H. (2023). How to deal with virtual property crime: Judicial dilemma and a theoretical solution from China. *Computer Law & Security Review*, 49, 105808. [Crossref]
- [5] Ivanov, V. V., Trubnikova, T. V., & Churilov, A. Y. (2023, November). Liability in the World of Games: The Interaction of Positive and Soft Law. In *International Conference on Professional Culture of the Specialist of the Future* (pp. 134-144). Cham: Springer Nature Switzerland. [Crossref]
- [6] Metthania, A. Z., & Dalimunthe, S. N. I. S. (2022). Legal Protection for Parties in Sale and Purchase Transactions of Virtual Objects. *Volkgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 267-277. [Crossref]
- [7] Li, X., & Xiao, X. (2023). Research on the legal issues of inheritance of virtual property on the internet. *Journal of Humanities, Arts and Social Science*, 7(9). [Crossref]
- [8] Bruckermann, C. (2021). Network marketing and state legitimacy in China: Regulating trust from physical workplaces to virtual spaces. *Economic Anthropology*, 8(1), 86-101. [Crossref]
- [9] Zhang, M. (2024). Property attribute and property ownership of virtual property. *Proceedings of Business and Economic Studies*, 7(5), 43-48. [Crossref]
- [10] Niu, Z. (2023). Study on the attribute dispute of virtual property and countermeasures. *International Journal of Frontiers in Sociology*, 5(11). [Crossref]
- [11] Li, Z., Zhang, W., Zhang, H., Gao, R., & Fang, X. (2025). Global digital compact: A mechanism for the governance of online discriminatory and misleading content generation. *International Journal of Human-Computer Interaction*, 41(2), 1381-1396. [Crossref]
- [12] Gaffar, H., & Albarashdi, S. (2025). Copyright protection for AI-generated works: Exploring originality and ownership in a digital landscape. *Asian Journal of International Law*, 15(1), 23-46. [Crossref]
- [13] Pandey, D., & Gilmour, P. (2024). Accounting meets metaverse: navigating the intersection between the real and virtual worlds. *Journal of Financial Reporting and Accounting*, 22(2), 211-226. [Crossref]
- [14] Garcia-Teruel, R. M., & Simón-Moreno, H. (2021). The digital tokenization of property rights: A comparative perspective. *Computer Law & Security Review*, 41, 105543. [Crossref]
- [15] Fiaz, F., Sajjad, S. M., Iqbal, Z., Yousaf, M., & Muhammad, Z. (2024). Metassi: a framework for personal data protection, enhanced cybersecurity and privacy in metaverse virtual reality platforms. *Future Internet*, 16(5), 176. [Crossref]