Study on Copyright Infringement Liability of Short Video Platforms from the Perspective of Intelligent Algorithm Recommendation

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Abstract: In the context of the Internet era, with the continuous development of the short video industry, the intelligent algorithmic recommendation technology to provide personalized content for users is widely used by short video platforms. However, the use of this technology has facilitated the occurrence of infringement on a large scale, resulting in damage to the rights and interests of copyright owners. China's existing legislation lacks specific and detailed provisions on the specific liability scenarios of "algorithmic recommendation". In judicial practice, there is no uniform standard for determining whether and how the platform should be held liable, and the academic community also has different opinions. To address this issue, it is necessary to analyze the issue from the perspective of the traditional safe haven principle and in conjunction with specific theories such as the principle of technological neutrality. In addition, it is also necessary to explore the divergence in judicial practice on the duty of care of the platform in the light of classic judicial cases. On this basis, further specific paths for reconfiguring the boundaries of responsibility are proposed.

1 INTRODUCTION

As the market scale of the short video industry is growing explosively and the group of short video creators is getting bigger and bigger, the intelligent algorithm recommendation technology has become the core means for platforms to enhance user stickiness and commercial revenue. Intelligent algorithm technology can efficiently collect, mine and parse the massive user behavior data accumulated on the platform, so as to further accurately identify the interests and preferences of each user. Ultimately, through information matching technology, the content that is highly suitable for the personalized needs of the user is automatically recommended to the user's field of vision, so as to realize the precise and automated information push service (Le &Wang et al., 2025).

However, this technology has also contributed to the large-scale dissemination of infringing behaviors such as editing and handling of movie and television works, resulting in frequent damage to the interests of right holders and a sharp increase in the cost of social justice. In this context, the traditional "safe harbor principle" is lagging behind due to its reliance on the "notice-and-delete" rule, and platforms often use "technology neutrality" as a reason to avoid responsibility. At the same time, the existing technical difficulties are the high cost of infringement identification due to massive short video content, and the algorithm accuracy and efficiency still need to be improved. The existing law lacks detailed provisions on the specific liability scenarios of "algorithmic recommendation", and the courts are divided on the determination of the platform's duty of care in judicial practice.

In this context, in view of the current legislative status, judicial practice differences and theoretical disputes, this paper is to summarize the existing focus of controversy from the specific judicial practice - whether the platform is responsible for the results of the algorithmic recommendation, and how to be responsible for. From the specific theory, to put forward a specific path of reconstruction of the boundary of responsibility.

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2   RESEARCH STATUS

2.1   Status of Chinese legislation

China's current legal framework has gradually improved the regulation of platform liability for algorithmic recommendations, but there are still gaps in the system's articulation. The Copyright Law, as amended in 2021, expands the scope of copyright protection by introducing the concept of "audiovisual works", but fails to clearly define the liability of platforms in the context of algorithmic recommendations. Articles 1194-1197 of the Civil Code, which are the basic norms of network infringement, establish the joint and several liability of platforms when they "know or should know" of the infringement, and although it stipulates the obligation of "notification and deletion", the scope of application is still limited to the passive response mechanism, which fails to cover the new communication form of algorithmic active recommendation. The State Council issued the "Regulations on the Protection of the Right to Network Dissemination of Information" to continue the principle of safe harbor, requiring platforms to passively respond to requests for deletion, and strengthening the platform's obligation to dispose of the aftermath, but did not make the mandatory requirements for platforms to review and filter video content. The "Regulations on the Administration of Algorithmic Recommendation of Internet Information Services" came into force in 2022. These regulations added some important new rules. They clearly state that algorithmic recommendation service providers must not use technical means to spread infringing content. Providers must set up a system to handle user complaints. They should also keep improving their algorithms to reduce the risk of infringement. In addition, they must take active steps to limit the spread of illegal content, such as deleting it and controlling its visibility.

However, China's existing laws lack detailed provisions on the specific liability scenarios of "algorithmic recommendation". It is worthwhile to further study how to apply the relevant provisions in specific cases, and to clarify the responsibility and duty of care borne by the platform.

2.2   China's Judicial Status and Policy Exploration

At the judicial level, some of the jurisprudence represented by the case of iQIYI v. a short-video platform adopted the "red-flag standard". They found that the platform "should have known" about the infringing content of the hit series. They broke the boundary of the traditional "notice-and-delete" rule. It reflected an expansive judicial interpretation of the duty of care in the context of technological innovation (Beijing Haidian District People's Court, 2018). In terms of industry governance, although the "Internet Information Service Algorithm Recommendation Management Regulations" advocates the value orientation of algorithms "upward and good", the design of specific provisions of copyright protection is still too rough, and there is a lack of clear and operable specific implementation rules.

Therefore, some scholars suggest drawing on the EU Digital Single Market Copyright Directive to promote the adoption of filtering technologies such as Content ID by platforms in order to build a preventive liability system. However, other scholars oppose the introduction of the mandatory filtering mechanism in the EU Digital Single Market Copyright Directive, arguing that it may inhibit innovation, emphasizing the principle of technological neutrality and the principle of migratory platforms to determine liability. But the Chinese legislation has not yet included filtering technology in the scope of mandatory obligations (Tang, 2017 … Li, 2025).

Currently, legislation is lagging behind technological development, resulting in the criteria for determining platform liability oscillating between judicial discretion and technological circumvention. In judicial practice, the court has not yet formed a unified standard for the judgment of the duty of care of the platform under the algorithmic recommendation scenario, and there is disagreement between the theoretical community and the practical community on the delineation of the boundary of responsibility (Sin, 2024). The principle of "technological neutrality" has also been gradually exposed as a loophole for abuse in the process of application, and some platforms have utilized it to circumvent the obligation of active review, which reflects the risk of disorder in the rule system (Peng & Ding, 2022). How to establish a mechanism to balance technological innovation and rights protection in order to regulate the short video platform algorithmic recommendation infringement phenomenon has become an important issue that the copyright system in the digital era needs to respond to.

3 THEORETICAL CONTROVERSIES AND ADJUDICATIVE DISAGREEMENTS

In judicial practice, platforms often rely on the "safe haven principle" to launch the defense, to receive notice has been taken down, blocking the infringing content as a defense, so that the traditional "notice-deletion" mechanism is in a predicament, the phenomenon of infringement is worsening (Peng & Ding, 2022). At the same time, in the context of the increasing popularity of algorithmic recommendation technology, platforms advocate "technological neutrality" as a means of avoiding the obligation to review algorithmically recommended content, as well as the responsibility arising therefrom. This phenomenon has led to differences in academic and judicial practice on the determination and division of the duty of care assumed by the platform.

3.1 Dilemmas in the Application of the Safe Haven Principle

The "safe harbor rule" was created by the Digital Millennium Copyright Act, enacted in the United States, whose traditional "notice-and-takedown" mechanism relies on manual review. However, short video platforms actively intervene in the dissemination of content through algorithms (e.g., dynamically adjusting search weights, implementing personalized push), gradually building a new governance framework of "algorithmic notification-algorithmic deletion" and transferring the obligation of censorship to algorithms. This shift has led to the traditional "notice-and-takedown" mechanism falling into an inefficient cycle - copyright owners are not willing to defend their rights due to the difficulty of proof and low compensation, while platforms have formed a path of dependence and passively wait for notices of infringement from rights holders (Li, 2025 & Xu & Wei, 2025). However, faced with a massive amount of short video content, algorithms are difficult to correctly and accurately identify fair use, resulting in fair use content being mistakenly deleted, and the anti-notification program, which should be a relief mechanism, is difficult to play a substantive role due to technical barriers and procedural idleness, which objectively results in an imbalance between copyright protection and freedom of expression (Li, 2025).

3.2 The Contradiction Between Platform Responsibility and Technological Neutrality

The core competitiveness of the platform as an information intermediary lies in the efficiency of its algorithm, which can accurately recommend commodities and contents through users' preferences and browsing data to enhance the commercial value of the platform. However, when recommending contents, the platform may be driven by commercial interests and prioritize the pushing of contents of certain copyright holders while ignoring the rights and interests of other copyright holders, to achieve differentiated management. Such selective copyright protection can lead to unfair market competition and jeopardize the interests of copyright holders and users. When faced with allegations of copyright infringement, platforms often claim technological neutrality and evade responsibility on the grounds that the algorithms run automatically and that they cannot control the results of their own recommendations (Zhou, 2023). This has triggered a reflection on technology neutrality, i.e., whether the technology is neutral and whether the platform should take responsibility for the results of algorithmic recommendation. Algorithmic recommendation is not a completely neutral technology, and will be driven by the commercial interests of the platform, the platform in order to maximize traffic and maximize commercial interests, will be actively intervening in the distribution of content through parameter adjustments. For example, the platform may increase the recommendation weight of certain popular content or paid content, and reduce the probability of recommendation of other content. This intervention constitutes the basis for the determination of "should know" infringement in Article 1195 of the Civil Code, i.e., the platform should know that the content it recommends may have the risk of infringement, but still recommend it, and thus should bear the responsibility for infringement. This shows that the platform in the algorithmic recommendation is not a passive technology provider, but a subject with subjective intent and control ability, should bear the duty of care. Based on the non-neutrality of algorithmic recommendation, the obligation of the platform should also be expanded. From the point of view of foreseeable possibility, the platform, as the developer and manager of the algorithm, should foresee the risk of infringement and other negative impacts that the algorithmic recommendation may bring. From the point of view of control ability, platforms can adjust and optimize the algorithms through technical means, to control the

recommendation results. Therefore, platforms need to be responsible for the recommendation results, especially for popular content, and need to assume a higher audit obligation. For example, platforms need to adopt technical filtering (e.g. video fingerprinting) and manual auditing for popular dramas and well-known works to form a "selective" protection mechanism.

3.3 Differences in Judicial Practice on the Recognition of the Duty of Care of Platforms

3.3.1 Typological Analysis of Typical Cases

The differences in the determination of the platform's duty of care under the algorithmic recommendation scenario are centrally manifested in the differences in the weighing scale between the principle of "technological neutrality" and the standard of "should know" in judicial decisions. By sorting out the two types of typical cases, it can be summarized into "strict standard" and "loose standard" adjudication path.

First, strict standards - take the case of "iQIYI v. ByteDance" as an example (Beijing Haidian District People's Court, 2018). In the case of iQIYI v. ByteDance, the platform pushed a large number of clips infringing on the copyright of Yanxi Raiders to users through an algorithm. The court broke through the traditional mechanism of "notification-deletion" and held that the platform's failure to take the necessary measures despite knowing the existence of a large number of infringing behaviors by users was an act of helping infringement. As Table 1 shows, it also argued that the platform was "knowingly" at fault from three aspects: technical interference, commercial profitability, and technical feasibility. The court's final decision rejected the platform's "technology neutrality" defense and imposed a higher duty of care on the platform. The case demonstrated a strict standard of adjudication, and the judgment's determination of the scope of the platform's "due diligence" was also a source of controversy.

The second is a lenient standard - take the case of "The General History of China in the Museum" copyright dispute as an example (Beijing Intellectual Property Court, 2024). In that case, the platform recommended infringing documentaries uploaded by users through a collaborative filtering algorithm, but did not set specific recommendation rules. As Table 1 shows, the court strictly applied the standard of "knowledge or substantial assistance", and held that the platform's algorithm was generated automatically based on the user's behavioral data, not as a result of the platform's active intervention, with respect to the infringing videos other than those repeatedly uploaded by the user "Duo Moumou". Some of the

Table 1: Comparison table of adjudication standards between the case of iQIYI v. ByteDance and the copyright dispute case of "The General History of China in the Museum.

Dimension	Whether the platform actively intervenes in the technology	Platform commercial profitability	Feasibility	Scope of the Platform's "due diligence"
iQIYI v. Byte Jump	The platform actively intervened with technology that utilized algorithms to actively recommend infringing content.	The platform profited from actively intervening by recommending and distributing infringing content.	The platform had more sophisticated copyright filtering technology, but didn't take the necessary measures to block the distribution of infringing content.	The platform had sufficient conditions, capacity and reasonable grounds to know that the user had committed the infringement in question.
Copyright dispute over The General History of China in Museums	The platform didn't actively intervene in the technology and only used collaborative filtering algorithms to recommend and didn't set special recommendation rules.	The platform's algorithm was only given to the automatic generation of the user's behavioral data, not the result of the platform's active intervention, and the platform didn't have the intention to profit from infringing content.	The platform had more mature copyright filtering technology, but didn't take action to stop repeat infringement that matched its distribution capacity, but removed other infringing videos in a timely manner.	The platform's algorithmic recommendation was a personalized recommendation tailored to the user's behavioral data, which was different from the judicial active recommendation, and the platform did not know that the personalized recommendation was an infringing video.

judgments in this case reflect the neutral and tolerant stance of the judiciary towards algorithmic recommendation technology, and reject the view that platforms adopting algorithms should bear a higher degree of responsibility.

3.3.2 Focus of Divergence in Court Decisions

Algorithmic recommendation technology has had an impact on the traditional tort liability system. It is mainly reflected in the differences in the interpretation of the elements of "should know" and "necessary measures" in Article 1197 of the Civil Code. In judicial practice, there has been a large discrepancy in the court's determination of the two main elements. The determination of the platform's duty of care and liability has also generated considerable disagreement. The standard of "should know" is based on the traditional "red flag standard", that is, the fact of infringement is obvious and can be easily recognized, but the emergence of algorithmic recommendation technology makes it difficult to apply this standard (Chen, 2023). Is there a presumption that a platform "should have known" because it uses algorithmic recommendation techniques? If the algorithm has difficulty in recognizing infringing videos when they are first uploaded, does the platform have a "due diligence" obligation? These questions require further study.

4 PATHS TO RECONFIGURE THE BOUNDARIES OF RESPONSIBILITY

4.1 Amendment of the Principle of "Technology Neutrality"

Through the introduction of the "substantially contributes to infringement" standard, if the algorithm design significantly increases the risk of infringement (e.g., collaborative filtering to recommend popular infringing content), the defense of neutrality will be negated. The "initiative" and "purpose" of the algorithm design is the key to determining liability. If the platform deliberately guides users to infringing content through collaborative filtering and heat weighting, its behavior is beyond the scope of technological neutrality. In the ByteDance case, for example, the court found that the platform actively recommended infringing short videos through algorithms, which significantly improved the efficiency of content

dissemination and constituted a substantial promotion of infringement and thus could not invoke the principle of "technological neutrality" to exempt itself from liability. In addition, the "Recommendation System Transparency" clause in the EU's Digital Services Act (DSA) requires platforms to disclose the logic of their algorithmic recommendations to assist courts in assessing whether the algorithms tend to infringe. For example, if the platform's algorithm gives priority to unauthorized film and television clips, even if the content is not directly uploaded, the algorithm may be liable for indirect infringement due to the "induced" design of the algorithm.

Judging the platform's proof of subjective fault in the judiciary can be aided by algorithmic transparency requirements for judicial determinations. In terms of the algorithm filing system, platforms are required to file core recommended algorithm parameters and update records with the regulatory authorities to ensure traceability after the fact. For example, China's "Regulations on the Administration of Algorithm Recommendation for Internet Information Services" have made clear the filing requirements, which can be extended to copyright infringement scenarios. In terms of the obligation to provide an explanatory report, in infringement litigation, platforms are required to submit an explanatory report on the algorithm's decision-making logic, proving that they have taken reasonable measures to avoid the proliferation of infringing content. If the report contains logical contradictions or avoids key issues, the platform is presumed to be at fault.

In terms of third-party technical audits, a third-party independent technical organization can be introduced to conduct compliance audits of algorithms, focusing on evaluating the effectiveness of their copyright filtering measures, such as comparison coverage, false positive rate and other indicators.

4.2 Setting a Dynamic Standard of Duty of Care

4.2.1 Tiered Model of Obligations

According to Article 1195 of the Civil Code, based on the provisions of network infringement liability, combined with Article 42 of the E-Commerce Law, "Notice-Delete" rule, the platform liability is positively correlated with the algorithmic control and Article 24 of the Cybersecurity Law, "Necessary Limits of Technological Measures", should be

adopted. The platform's liability is positively related to the control of the algorithm and the "necessary limit of technical measures" in Article 24 of the Cybersecurity Law. Therefore, the platform should make a comprehensive judgment on the control of the algorithm (e.g. whether to actively set up the recommendation rules), the heat of the infringing content, and the record of repeated infringement. At the first level, the platform designs the algorithmic rules completely independently, but the platform needs to assume the obligation of prior filtering (e.g., deploying copyright fingerprinting system) and real-time monitoring of hot content. At the second level, third-party algorithm services are used, but the compliance of the third-party algorithms must be audited, and reports on the handling of infringing content must be submitted regularly. At the third level, the platform only provides basic recommendation functions and fulfills the obligation of "notification and deletion" but needs to take measures to restrict or block repeated infringing users.

4.2.2 Technical Feasibility Considerations

Based on the feasibility of technology and the effectiveness of filtering, platforms should adopt filtering measures (such as keyword shielding and copyright library comparison) that match the algorithmic capabilities. In small and medium-sized platforms, basic measures such as keyword shielding and MD5 hash value comparison can be implemented for filtering, while in large-sized platforms, AI image recognition and audio fingerprinting technologies (e.g., YouTube Content ID) can be deployed to realize accurate interception of infringing content, or to explore the automatic authorization of blockchain deposits and smart contracts, so as to build an ecosystem of full-chain copyright protection of "creation-dissemination-vindication" or explore blockchain certificate and smart contract automatic authorization, to build a "creation-dissemination-rights defense" full-chain copyright protection ecology.

4.3 Construction of a Multi-Dimensional Co-Governance Mechanism

The reconfiguration of the liability boundary should consider the balance between copyright protection and technological development. As for the platform, as the beneficiary of the algorithm, the platform should bear the main responsibility for data security

according to Article 9 of the Data Security Law, and should also avoid the "one-size-fits-all" type of censure, and be allowed to gradually optimize the algorithm within the scope of technical feasibility; for the right holders, the exceptions to the "Safe Harbor Principle" should be perfected. For rights holders, it is necessary to improve the exceptions to the "safe haven principle" and clarify the standard of proof for substantive infringement; for users, it is also necessary to protect the reasonable use of space, and to avoid excessive filtering to inhibit secondary creativity and cultural exchanges. Through the establishment of a copyright pre-authorization database and an efficient notification and deletion mechanism, the cooperation between platforms and right holders can be realized, while promoting the intervention of algorithmic ethical review and third-party technical assessment. In the future, market-based mechanisms such as "algorithmic liability insurance" can be explored to diversify the compliance risk of platforms, while promoting the formation of technical autonomy standards in the industry.

5 CONCLUSION

At a time when intelligent algorithmic recommendation is booming, the issue of copyright infringement liability of short video platforms has become more and more prominent. From amending the principle of "technology neutrality", to establishing a dynamic duty of care standard, to improving the infringement relief mechanism, this series of initiatives aims to balance the relationship between technological innovation and copyright protection. However, as technology continues to evolve, new forms of infringement and complex issues will continue to emerge. In the context of globalization, the dissemination of short videos knows no boundaries, so international cooperation in short video copyright protection will also become increasingly close. Countries need to strengthen exchanges and collaboration, jointly formulate internationally accepted rules and standards for short video copyright protection, combat cross-border infringement, and create a favorable international environment for the healthy development of the short video industry. In the future, it is necessary to pay continuous attention to the development of the industry and continuously improve the relevant legal system and governance measures, to prompt short video platforms to continue to innovate on a legal and compliant track, and to realize a win-win situation

between technological progress and copyright protection.

AUTHORS CONTRIBUTION

All the authors contributed equally and their names were listed in alphabetical order.

REFERENCES

B. Chen, 2023. Multi-dimensional thinking of platform algorithmic regulation: from case-by-case infringement adjudication to algorithmic comprehensive governance. L. A. J. 3, 91-94.

Beijing Haidian District People's Court. (2021, December 31). Civil Judgment [(2018) Jing 0108 Min Chu No. 49421].
https://www.sohu.com/a/518790526_121123754

Beijing Intellectual Property Court. (2024, December 19). Civil Judgment [(2024) Jing 73 Min Zhong No.180].

C. Y. Le, Z. X. Wang, J. P. Zhang, et al. 2025. Research on user algorithm response behavior under intelligent recommendation of short-video platforms. *Libr. Dev.* **4**, 1-28.

G. B. Peng, Y. W. Ding, 2022. The Copyright Dispute of Short Video Platform in Intelligent Communication and Its Governance Path--An Appraisal of the First Case of Algorithmic Recommendation. *S. J. R.* **9**, 86-96.

H. Zhou, 2021. Governance of Imbalance of Interests in Copyright License Contracts- Mirror of the *EU Digital Single Market Copyright Directive*. Intellect. Prop. **5**, 41-55.

J. M. Sin, 2024. Controversy and Optimization of Judicial Determination of Copyright Duty of Care for Short Video Platforms under Algorithmic Recommendation. *J. S. U. (P. S. S.)*. **26**, **S1**, 106-111.

K. Y. Xu, J. Wei, 2025. Study on Selective Copyright Protection Behavior of Short Video Platform Algorithms. *S. S. I. G.* **2**, 38-52, 286.

S. H. Tang, 2017. Study on Copyright Exceptions for Text and Data Mining in Big Data Environment - A Perspective on the EU's Proposal for the DSM Copyright Directive. *Intellect. Prop.* **10**, 109-116.

S. H. Zhou, 2023. "The first case of algorithmic recommendation" in the short video platform's duty of care determination study. S. S. I. G. **4**, 64-72.

X. Y. Li, 2025. Systematic Regulation of Algorithmic Recommendation Infringement on Short Video Platforms. *H. L. S.* **6**, 147-163.

Y. Wan, 2021. China's Choice of Mandatory Filtering Mechanism in Copyright Law. *S. I. L. B.* **6**, 184-196.