

The Identification Scope of Duty of Care of Network Service Providers in the Algorithm Recommendation Era

Wanqi Hu^{1,a,*}

¹Southwest University of Political Science and Law, 301 Baoshenghu Street, Yubei District, Chongqing, China

a. 2021101006@stu.swupl.edu.cn

**corresponding author*

Abstract: In the era of algorithm recommendation, the Internet has experienced major realistic changes such as "technology neutrality" and "technology cannot", which leads to inevitable changes in the duty of care of Internet service providers. The identification of the scope of the duty of care has become an important focus of dispute in infringement cases of Internet service providers, and the court has exercised its discretion. At present, the scope of the duty of care in China's legislation still has some deficiencies, such as low level of legal effect and vague definition standard, and there are also great disputes in the handling of practical cases. Considering the influence of the platform strength, the completeness of the notice and other factors, the scope of the duty of care should be appropriately increased according to the specific case in the infringement litigation of network service providers, and it should be distinguished from the duty of review. Starting from judicial practice, this paper suggests that the current duty of care be refined: according to the time stage of the case, the duty of care is divided into before, during and after, and the duty of care of the platform is appropriately improved in each link.

Keywords: duty of care, duty of review, algorithm recommendation

1. Introduction

The duty of care of network service providers mainly refers to the obligation of foreseeing, preventing and controlling their own or others' infringements within a certain range. As one of the important subjects in cyberspace, network service providers bear more obligations of care in information cyberspace, including but not limited to information network computing and storage, information publishing, search engines, and information network application services. The duty of care of Internet service providers occupies an important position in tort law and plays an important role in balancing the interests of civil subjects, Internet service providers and the public. However, in the context of algorithm recommendation, the role of Internet service providers has changed, and the changing scope of their duty of care has become a hot topic and controversial. On January 1, 2021, the "Civil Code" was officially implemented, and the tort liability in it further stipulates the duty of care of Internet service providers on the basis of the original "Tort Liability Law of the People's Republic of China". In addition, it provides the form elements of notice in the Notice-delete rule, the obligation of "transfer notice" and necessary measures, the content of the "anti-notice" rule and the subjective elements of infringement that the network service provider "knows or should know". Since then, duty of care, as

an important factor in the determination of negligence tort, has become the key to the determination of tort liability of Internet service providers in China.

However, in the context of the widespread use of algorithm recommendation technology, the existing laws and regulations mainly reflect how to identify the breach of duty of care by network service providers, while ignoring the positive provisions on the scope of duty of care. In practice, the duty of care is often mixed with the duty of review, and the judge's judgment standard is different, so it is difficult to form a unified and clear standard in theory and practice. To clarify the duty of care of Internet service providers, it is necessary to clarify the difference between the duty of care and the duty of review, and judge it in stages according to the criteria such as whether the infringement notice is received, and appropriately improve the duty of care of Internet service providers in individual cases.

This paper aims to analyze the duty of care of network service providers from multiple angles, addressing the existing legislative framework, theoretical controversies, and practical challenges. It discusses the confusion between the duty of care and the duty of review, suggesting improvements based on whether an infringement notice has been received and the specific circumstances of cases. By providing a comprehensive examination of the concept, legislative evolution, academic debates, and judicial discrepancies concerning the duty of care, this paper offers targeted recommendations for refining the legal framework. It will play an active role in determining the duty of care of network service providers in the future.

2. The Legislative Evolution and Dilemma of the Duty of Care of Internet Service Providers

The duty of care of Internet service providers is the key factor to determine whether the Internet service providers indirect infringement. In China, the provision of the duty of care of Internet service providers is established by drawing lessons from foreign laws and combining with national conditions, and has undergone great changes after years of development and innovation.

2.1. Before the Civil Code

China's safe harbor rule is the product of DMCA, DMCA Article 512 clearly stipulates the safe harbor rule and the red flag rule. However, the third paragraph of article 36 of the Tort Liability Law of China expresses the word "know", which has caused many theoretical disputes concerning "know" and "should know", which has brought great obstacles to judicial practice. The Regulations on the Protection of the Right of Information Network Transmission issued in 2006 introduced the "safe harbor - red flag" rule for the first time, namely the "notice principle" and "know principle". The introduction of the rule was based on the "safe harbor" rule in the Digital Millennium Copyright Act of the United States, and set up the "notice-delete" intellectual property liability rule for Internet service providers [1]. That is, the network platform does not need to perform the obligation of prior review, and can be exempted from liability by taking necessary measures such as timely deletion after receiving the infringement notice. This principle has since defined the foundational duty of care model for network service providers in China.

Later, the "Provisions on Several Issues concerning the Application of Law in the Trial of Civil Disputes concerning Infringement of the Right of Information Network Communication" issued in 2012 further determined the application of the "Red Flag Rule". However, the Provisions of the Supreme People's Court on Several Issues Relating to the Application of Law in the Trial of Civil Disputes Concerning Infringement of the Right of Information Transmission through the Network issued by the Supreme People's Court at the end of 2012 clearly stipulated for the first time the specific circumstances of the above-mentioned faults of Internet service providers, proposing that Internet

service providers have a "higher duty of care". These provisions also explicitly stated that Internet service providers are not obligated to censor content, which has led to ongoing challenges in defining the scope of their duty of care.

2.2. After the Enactment of the Civil Code

With the enactment of the Civil Code, specific regulations concerning the responsibilities of Internet service providers have been refined and extended. Article 1194 directly addresses the issue of direct infringement by service providers using the internet, building upon the foundational principles outlined in Article 36 of the Tort Liability Law of the People's Republic of China. Articles 1195 to 1197 further elaborate on indirect infringements, detailing the responsibilities of service providers when they either know or should know of an infringement by a user but fail to intervene or take necessary actions after receiving a notification. This framework establishes a procedural sequence involving the infringement notice from the rights holder, the platform's responsive actions, the user's declaration of non-infringement, and the eventual content recovery by the platform.

For the duty of care of traditional Internet service providers, despite several legal amendments and judicial interpretation revisions, Chinese lawmakers always uphold the position of "technology neutrality", "notification rule" as the principle, "know rule" as the exception [2].

However, compared with the Chinese and American systems, it is not difficult to find that China has a large degree of inadequacy in the provisions of duty of care, which cannot provide objective and accurate standards in judicial practice, resulting in low judicial efficiency, which leads to confusion in the judicial system and low accuracy in case handling. For example, negligence has been included in the scope of "should have known" by default in Chinese law, but the "obvious knowledge" under the red flag rule of DMCA is presumed to be knowledge, and its essence is intent rather than negligence, which leads to errors and confusion in the judicial system. At the same time, the provisions on the duty of care in the relevant provisions of China's civil law are relatively scattered, without forming a systematic and comprehensive system, and only Article 1242 of the Civil Code clearly mentioned these four words, the vague provisions on the duty of care also caused obstacles to the judicial development of China.

2.3. Theoretical Analysis of the Duty of Care of Network Service Providers

As mentioned above, the technological change of the "technology neutrality" has gradually shifted to the "technology intervention", "more and more views believe that the current" safe harbor "rules on platform responsibility have failed, and have been differentiated into a tool for short video platforms to avoid responsibility [3,4]." In the academic field, scholars have also discussed the scope of duty of care, among which there are both consensus and disagreement.

Some people argue that in the era of arithmetic recommendation, platforms have more opportunities to make profits and the amount of profits is on the rise, then the expansion of the corresponding duty of care of network service providers has become an inevitable trend, and more stringent regulations should be imposed on network service providers. As the so-called profit and risk coexist, network service providers rely on the advantages of information networks to earn more benefits, and correspondingly need to assume more obligations to provide more protection for network users, rights subjects, and the public. This is understandable.

However, there are some disputes about the duty of care of Internet service providers. Some scholars have proposed that the duty of care can be divided into "pre-prevention" and "post-regulation" based on whether the infringement notice is received [5]. "Pre-prevention" refers to the construction of copyright content filtering mechanism by Internet service providers in the non-notification stage. The "post-regulation" appears after receiving the infringement notice, and the

network service provider regulates the infringement. Generally speaking, in the notified stage, it is necessary to construct the dual duty of care of "pre-prevention" and "post-regulation". This is because, in the traditional view, the duty of care of Internet service providers is often assumed to be a single period of time, which is incomplete in the course of the case, resulting in a hasty conclusion that the Internet service platform has fulfilled its duty of care and thus exempted from tort liability. In the era of arithmetic recommendation, the more stringent duty of care also requires that the duty of care of network service providers should cover more time and space, so as to protect the interests of others.

In addition to the pre - and post - review obligations proposed by scholars, there are also scholars who advocate "active review obligation" and "passive review obligation". Active review obligation refers to the review conducted by network service providers when they do not know or should not know the infringing content, while passive review obligation refers to the review that must be carried out within the scope of the duty of care [6]. To a certain extent, the obligation of active review reflects the expansion of the duty of care, which requires network service providers not only to have legal awareness, but also to have moral quality. Most network service providers are difficult to do this, and it is difficult to operate in the real society, and the practical significance given by it is limited.

3. Disputes Regarding the Determination of Duty of Care in Judicial Practice

Due to the controversy in academia and the inconsistency in legislation, there are different judgment standards for the scope of duty of care.

3.1. Confusion Between Duty of Review and Duty of Care

Before the promulgation of the "Civil Code", especially after the provision of content review obligation was added to the "Regulations on the Protection of the Right of Information Network Transmission", there was a situation that the duty of care and the duty of review were confused in the process of review in most practical cases. This misunderstanding was clarified in the case of "Huan TV Network Company v. Jiecheng China TV Network Company infringement [7]". In the case, the company argued that it was a provider of information storage services and that it had no obligation to review content posted by users in advance. By making use of the vague contrast between the duty of care and the duty of examination, it excludes the possibility of its own infringement and denies the fact of its own infringement. However, the court held that although there is no "knowing" fact, the company has the obligation to "know", it should be aware of the fact that the works involved are located in the obvious position of the company's website and printed with watermarks, and bear a higher duty of care for the content uploaded by users to its website, rather than the censorship obligation often said, and finally decided that the company bears the infringement liability.

3.2. Adjusting the Duty of Care Based on Case Specifics

Taking the types of infringement objects as an example, in the "Han Han v. Baidu Wenku Copyright Infringement Dispute [8]", the court held that Han Han, as an influential contemporary writer, has a large sales volume and high popularity of his representative works, and Baidu should fulfill a higher duty of care than ordinary infringing documents. Under the legislative framework of China, although the Internet service providers usually do not have the obligation to review and filter the infringing acts in advance, it does not mean that the Internet service providers can let the infringing acts of the platform occur without control and restriction. Under the background of algorithm recommendation technology, especially when the Internet service provider is fully capable of stopping the infringement or reducing the damage result, it fails to fulfill its reasonable duty of care, so it is judged that it constitutes "should know" [9]. The judgment result of the court shows that for the network service platform with certain technical capabilities, its duty of care has long been not only confined to

passively waiting for the infringement notice, but also required it to take active measures to prevent the occurrence of infringement within the scope of its ability. Therefore, the description of "higher duty of care" has a realistic value basis.

3.3. Impact of Algorithm Recommendation Technology on the Duty of Care

In the country's first algorithm recommendation case "iQiyi v. Beijing Bytedance Technology Co., LTD. (hereinafter referred to as "Bytedance ") case [10]", Bytedance argued that as a network service provider, it had fulfilled its reasonable duty of care, and there was no subjective fault of infringement, which did not constitute infringement. On the one hand, the court of first instance denied Bytedance's direct infringement. However, on the focus of whether Byte company constitutes indirect infringement, it is necessary to judge by "whether it constitutes knowing or should have known" and "whether it has taken necessary measures after receiving the notice". It is worth noting that iQiyi mentioned in the litigation process that the application of algorithm recommendation technology has a higher duty of care than the general duty of care, including preventing and stopping the upload of infringing content in advance; Timely detection of infringing videos; After receiving the notification, take necessary measures such as deleting or blocking in time [11]. At the same time, the court also tried to exert its discretion to break through the original content and scope of "duty of care", holding that while providing convenient and high-quality network services, the platform should fulfill the necessary or even higher duty of care in a cautious and rigorous attitude to protect the legitimate rights and interests of the right holder [12].

In judicial settings, the duty of care is often vaguely defined or overly simplified as merely a "concern," neglecting its scientific and systematic requirements. As algorithm recommendation technologies evolve, they challenge traditional notions of the duty of care, necessitating that service providers adapt to meet higher standards to ensure the protection of digital content and rights in an increasingly complex cyber landscape.

4. The Direction of Establishing and improving the Standards of Duty of Care

Due to the development of algorithm recommendation technology, network service providers not only provide information storage space services, but also provide information flow recommendation services. The upgrade of service provision enables the platform to obtain greater benefits and more advantages, which should coexist with greater infringement risks. Therefore, the expansion of the scope of duty of care is an unavoidable trend, which is almost indisputable. But the exact scope of the expansion has become a point of contention. In view of the application problems existing in practice, the following suggestions are provided:

4.1. Appropriately Raise the Duty of Care in Light of Individual Cases

In Anglo-American law, the "Caparo test" standard was developed from the case, which was produced in the case of Caparo Industries v. Dickman. In the analysis of the case, the judge put forward three defining standards for the general duty of care: foreseeability, proximity, fairness [13]. This standard generally exists in the determination of the duty of care standard of Internet service providers. In infringement cases, Internet service providers often claim that their algorithm recommendation does not have value judgment and require exemption from liability according to the principle of "technology neutrality". However, with the continuous enhancement of the professional ability of the algorithm recommendation service platform, the "censorship cannot" caused by "technology cannot" has gradually been overcome, and the view of "technology neutrality" has also swayed. Therefore, it is necessary to appropriately improve the duty of care of network service providers according to the

case. In practice, each case has its own characteristics, to find the commonality of cases, we can think from the subject type, object type and behavior pattern of such cases.

For the subject type, according to the operation mode of the algorithm recommendation service platform and the operating principle behind it, analyzing the professional and technical capabilities of the platform is the first step to determine whether the "higher duty of care" should be fulfilled. An effective judge held that "iQiyi, as a well-known website providing film and television and entertainment videos, takes the provision of film and television works as an important business of the website, and its professional ability to review film and television works makes it liable for censorship obligations [14]", not just a traditional duty of care.

For the object type, combined with the cases mentioned above, how to determine whether a particular work is a popular work has not been set a unified standard, at present, it can be combined with the specific factors of the case to make a comprehensive determination, such as actors, box office and audience rating. In the effective judgment documents of some courts, the court directly emphasized that the works involved were not hit dramas, and concluded that the platform bore a lower duty of care [15].

Although the personal factors of the judge still have an impact, the space for free thinking and judgment has become limited compared to before, thus improving the accuracy of the decision of the case.

4.2. Establish the Duty of Care in Stages

The duty of care of Internet service providers is still based on the "notification rule", which is essentially a negative duty of care after the event. China's legislation should regulate the duty of care before and during the event at least to the same strict degree. There is a higher obligation to edit, select, recommend and directly obtain economic benefits from the content uploaded by users, which can reduce the liability for subsequent infringement. To be specific, the duty of care in advance is often the action taken by the network service provider to prevent infringement. In the practice process, the network service provider can review and check the works in the information network space under its jurisdiction according to the platform's identification capability and recommendation service, so as to avoid infringement. This has a high requirement on the ability of network service providers, but in the background of arithmetic recommendation, more and more network service providers have the ability to fulfill the obligation of prior care. The duty of care is mainly reflected in the process of handling disputes with network users. Generally speaking, it occurs when the duty of care has not been fulfilled or fully fulfilled in advance. Network service providers are required to show a friendly attitude of active cooperation and review the network service content recommended by the platform, which is often performed passively.

At the same time, the "necessary measures" involved in the duty of care after the fact should be strictly reformulated, especially with the continuous development of algorithm recommendation technology, the time, strength, cost and scope of measures should be reconsidered and reasonably formulated according to specific cases. For the duty of care after the event, network service providers should fully measure the value, not only in the objective behavior to take timely deletion, notification and other necessary measures, in the subjective mentality to be honest and good faith attitude.

4.3. Distinguish Between Duty of Care and Duty of Review

Traditional views and judicial practice focus on the relationship between the two, or regard the two as the same, but the way of description is different, ignoring the real connotation behind; Or consider the two as opposites, non-duty of care is the duty of review, and then choose one to explain in the judgment process. According to the traditional theory of tort liability, both of them are based on the

doer trying his best to find and stop the fact of tort. Both of them are institutional tools that match the form of fault and are essentially consistent in content and function [16]. At the same time, legislation and judicial practice often fall into a misunderstanding that they are opposite: the duty of review is prior, and the duty of care is post-facto. This leads to a paradox: not all Internet service providers have censorship obligations or the ability to censor obligations, so it is obviously unreasonable that these platforms should not have corresponding obligations in advance. In the "First case of NFT Infringement Dispute [17]", the infringer took advantage of the platform's pre-examination loophole, so the court pointed out in the judgment that "NFT platform should not only fulfill the responsibility of general network service providers, but also bear a higher duty of care", making a major breakthrough in the correct handling of the relationship between the duty of care and the duty of review.

In fact, the obligation of review and the obligation of care are cross-related, both connected and different, both can be interoperable and exclusive, and they can coexist with each other, which is also one of the concrete manifestations of the expansion of relevant obligations of network service providers. The two are interrelated. The examination can be an important means to fulfill the duty of care in some cases, and the duty of care can be a safeguard for the right holder when the examination duty cannot be fulfilled. The two also need to be different. In terms of subjective meaning, the review obligation is often active. It can either be destined to review the authenticity, illegality and danger of relevant acts before infringement, or it can review the content outside the notice based on the rights of the platform after receiving the infringement notice. The duty of care is not only active but also passive, it can be performed in the case of "knowing or should have known", and it can also be performed after receiving a notice of infringement. In terms of the degree of obligation, the examination obligation is often stricter, and its consideration and judgment of the case are often more serious. And the duty of care, as can be seen from the wording, even in the age of arithmetical recommendation, the scope of the content required will not be too strict, and will be more difficult to identify.

With the change of algorithm recommendation technology, the duty of care of network service providers does not start with strengthening the intensity of censorship, because "the information content on the platform is uploaded by network users themselves and there are a large number of users, requiring the platform to verify whether the massive information is authorized by the right holder will unreasonably increase the responsibility of network service providers." It is not conducive to promoting the healthy and sustainable development of the industry [18]. In the process of practical treatment, the duty of care and the duty of review should be combined with the case, so that they can complement each other and complement each other.

5. Conclusion

The technological change caused by the era of algorithm recommendation leads to the inevitable change in the scope of Internet service providers, and also makes the identification of the scope of duty of care become the core issue of infringement cases. However, China's legislation for the duty of care standards are not uniform, the academic community on this issue is also a hundred schools of thought. It is not difficult to find from the above cases that the identification of the scope of duty of care in China currently presents a diversified pattern in judicial practice, and the people's court has not yet formed a clear and specific standard and identification for the civil judgment of the duty of care of Internet service providers, which is also the inevitable result of non-uniform norms.

In view of the fairness and operability of the judgment, the expansion of the duty of care should be an inevitable trend. With reference to the determination methods of various courts in China and combined with the general characteristics of China's algorithm recommendation technology, the determination of duty of care should be revised and optimized from three aspects: first, according to

the time period, the duty of care before, during and after; Second, distinguish the similarities and differences between duty of care and duty of review. In addition, when distinguishing the subject, object and specific tort of a specific case, the duty of care should be appropriately raised in combination with the special circumstances of the case.

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