

## **Administrative Regulation of Social Media Algorithms in the European Union and America and Their Implications for China**

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**Abstract.** While social media algorithms have brought positive effects, they have also brought a series of crises that have sparked public concern about algorithmic technology. In response, many countries have adopted a series of regulations on platform algorithms. The EU mainly adopts a collaborative regulatory model between administrative agencies and private institutions, emphasizing both ex-ante and ex-post regulation of algorithms, and further reinforcing the obligations and responsibilities of social media platforms, as well as adopting focused regulation on large social media platforms. The U.S. mainly focuses on external accountability, industry self-regulation, and the protection of freedom of expression and democratic politics. By analyzing the dynamics and practices of administrative regulation of social media algorithms in the EU and the U.S., it is suggested that China should: build a multiple regulation model, realize the substantial participation of other subjects, explore the hierarchical and categorical regulation of social media platforms, strengthen the construction of anti-monopoly for large social media platforms, and enhance the whole process regulation of social media algorithms, with a belief of building a perfect social media algorithm regulation system.

**Keywords:** social media platform; algorithm; administrative regulation

### **1. Introduction**

In the era of intellectual media, online platforms have gradually become the emerging information dissemination medium in the Internet era, and social media-like online platforms have carried most of the tasks of traditional media and have become the main center of public expression and information exchange. And with the development of society and the progress of technology, algorithm technology has been widely used, and algorithms have become a way to solve problems by analyzing specific problems and designing a series of calculation steps and procedures to convert the input data into specific results to solve specific tasks. The trend of algorithm application has greatly changed the operation of social platforms, and algorithms have become a competing technical tool for major platforms, leading to a closer integration of algorithms and social

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media platform applications. Social platforms increasingly rely on algorithmic technologies to automate the management of information integration, classification and filtering, making the operation of platforms increasingly automated. On the one hand, the widespread use of algorithms in social media platforms brings many positive effects, which can significantly improve the efficiency of decision-making and provide more accurate and efficient services to users. On the other hand, while algorithms bring convenience to social media platforms, they also bring problems such as excessive access to personal information, homogenization of recommended content, lack of public content in information media, violation of users' autonomy rights, and proliferation of vulgar information [1]. The hidden, technical, and instrumental nature of algorithmic decision-making itself can hinder individual choice of information, exacerbate the loss of individual subjectivity, increase the excessive access to individual information, and ultimately lead to distrust in the application of algorithmic technology.

At present, countries have reached a consensus on the regulation of algorithms, and the administrative regulation of social media algorithms is being carried out in different degrees in the face of the infringement and potential risks brought by algorithms on social platforms. Among them, the administrative regulation of social media algorithms in the EU and the US is representative and typical. Accordingly, this paper compares the administrative regulation of social media algorithms in European Union and the United States, and their inspiration for the administrative regulation of social media algorithms in China.

## **2. Sorting out the dynamics of administrative regulation of social media algorithms in the EU**

The administrative regulation of algorithms in the EU is mainly reflected in the breadth of empowerment of individuals, the diversity of obligations undertaken by platforms, and the strictness of penalties, and these features have also made the administrative regulation of algorithms in the EU a hot topic of academic attention. The EU has launched the regulation of algorithms through a series of legislation such as the General Data Protection Regulation (hereinafter referred to as GDPR), the Regulatory Framework for Algorithmic Accountability and Transparency, the Artificial Intelligence Act, and the Digital Services Act (hereinafter referred to as DSA).

### **2.1. Co-regulatory model**

In terms of administrative regulation, the EU's regulation of algorithmic decision-making is not simply a traditional regulatory model, but a regulatory approach based on collaborative regulation with private enterprises and supplemented by traditional regulation and self-regulation by enterprises. The EU does not limit the regulatory relationship between regulators and enterprises to a single regulatory model, but divides between rules and standards, leaving the areas where enterprises should set their own standards and implement measures to enterprises, and leaving the areas where regulators should provide clear rules to administrative regulators, and combining ex ante prevention and ex post regulation on this basis to build a three-dimensional regulatory relationship [2]. In the EU GDPR, a typical example is Article 35, which sets the obligation of data protection impact assessment for data controllers, requiring them to specifically undertake the analysis, assessment and control of data processing risks, and the regulator

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only reviews the assessment report without participating in the specific assessment process [3]. At the same time, the EU encourages the development of codes of conduct and industry standards within the industry, firstly, after the code of conduct has been drawn up within the industry, and then submitted to the regulator for certification requirements for the code, and finally, the code approved and published by the regulator will become the minimum standard that developers of algorithmic technologies should comply with. The European Commission can also decide whether to legislate the code of conduct. As can be seen, the EU government is trying to diversify the regulation, attempting to regulate in concert with the regulated subjects, industries, social organizations, etc.

### **2.2. Pay attention to prior supervision and post-accountability**

The EU regulatory path for algorithms places emphasis not only on the prevention of algorithmic deviations, but also on ex post remedies. In terms of ex ante regulation, the GDPR directly grants data subjects the right to be free from constraints based solely on automated decisions and places restrictions on fully automated decisions. In addition, GDPR also gives subjects the right to know, access, correction, deletion, data portability and other rights, and wants to realize the governance of algorithmic issues with individual empowerment as the core. The complex application of technology in platform practice makes it more difficult for data subjects to understand various types of information. Empowering data subjects is to solve the negative impact of information asymmetry on them and to give them the right to refuse and control personal data. In the empowerment model, the prior mainly reflects the right to know and the right to choose, and the data subject has the right to understand the information related to the algorithm automated decision, the principle, function and process of automated decision, and then make the choice of personal information processing based on this. For example, the platform needs to obtain users' consent to collect their information, provide personalized recommendations, and automate decision making before providing services. In addition to granting rights to individuals, the GDPR also provides for a "data protection impact assessment" system, of which the algorithm assessment system is a risk assessment mechanism for algorithms, which represents an ex ante regulatory mechanism. The purpose of the algorithm assessment system is to establish risk-adaptive algorithm regulation, so that the stringency of regulation is based on the possibility of damage caused by the algorithm and the severity of the damage, and to build different regulatory systems for different key models of algorithmic systems [4]. It can be seen that the EU has effectively reduced the occurrence of algorithm infringement with strict algorithm application, empowerment of data subjects, and algorithm evaluation system beforehand.

In terms of post-facto accountability, this is mainly reflected in human intervention in the control of personal data. That is, when the algorithm automated decision has a negative impact on the data subject, the data subject has the right to object in a timely manner and the right to human intervention. For example, Article 16 of the GDPR provides for the right of correction, and when the data subject is inaccurate or incomplete, the data subject can request the platform or enterprise to correct his or her personal data in a timely manner. And in specific cases, if the data controller does not fulfill the data subject's legitimate request, the data subject can appeal to the supervisory authority,

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request the intervention of the supervisory authority, as well as seek judicial remedies. At the same time, the GDPR provides for the right of any person who has suffered material or non-material damage as a result of a violation of the GDPR to obtain compensation for the damage from the controller or the data subject.

#### **2.3. Strengthen the responsibility and obligation of the social platform**

With the release of the value of big data and the empowerment of algorithm technology, the strong rise of platform enterprises and their private power have gradually influenced the optimization and adjustment of social structure, changed the social lifestyle of human beings and reshaped the traditional economic production method. At the same time, the nature of platform enterprises has also changed quietly, breaking through the traditional role of a single commercial entity and taking on public responsibilities such as maintaining the social order of the network and the ecological governance of information content [5]. Under this, the EU regulation of social platform algorithms is mainly based on the platform's private power in information distribution and attention economy. The EU's regulation of digital service providers is mainly based on the E-Commerce Directive introduced in 2000, while the application of algorithmic technologies by online platforms today has led to the proliferation of illegal content, the erosion of users' rights, and the unfairness of platform competition, and the EU considers the original basis to be insufficient for the regulation of online platforms. Therefore, through the DSA, the EU attempts to further strengthen the responsibilities and obligations of platforms. For example, platforms are required to publish transparency reports, review platform recommendation algorithms, establish complaint mechanisms and set up notifications about illegal content. For social platforms, the more services you provide, the more obligations and responsibilities you need to take.

#### **2.4. Focused supervision of large platforms**

The EU DSA focuses particularly on the regulation of large social media platforms in order to protect the rights of users and the competitive position of small and medium-sized platforms in the market. The DSA establishes obligations for platforms in four categories: intermediary service providers, hosting service providers, online platforms, and mega online platforms. The former category of enterprises includes the latter category of enterprises, and the latter category of enterprises needs to overlay more obligations on top of the responsibilities of the former category of enterprises [6]. It can be seen that the EU has imposed stricter regulation on mega-platforms. Specifically, the DSA imposes stricter requirements than other platforms in terms of risk assessment, auditing, transparency, etc. The DSA views social platforms as the "gatekeepers" of the digital market, and social platforms need to act proactively and take special responsibility to ensure the regulation and safety of content on digital platforms. In addition, the DSA requires large social media platforms to be "gatekeepers" of the digital marketplace. In addition, the DSA requires large social media platforms to take steps to promptly address content deemed harmful by regulators, such as hate speech and false information, and to provide a channel for users to register their complaints about content review. And the DSA provides that social platforms that do not comply with the DSA will be fined up to 6% of their annual global sales.

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### **3. The practical experience of administrative regulation of social media algorithms in the United States**

The United States is influenced by a long tradition of privacy culture and governance, and lawmakers are accustomed to structuring privacy governance systems by limiting state power and ensuring market efficiency. As a result, the regulation of algorithms in the United States has been influenced by this, and both industry self-regulation and external oversight have coincidentally become important algorithmic governance tools [7]. Meanwhile, the focus of algorithmic regulation in the United States is to better achieve freedom of speech to guarantee the effective functioning of domestic democratic politics [8].

#### **3.1. Focus on external accountability**

The representative country for algorithm governance through external accountability is the U.S. The U.S. initially established the Algorithm Supervision Working Group to supervise algorithms in the public domain, such as algorithmic decisions affecting civil rights in the government and judiciary. But algorithms involve far more stakeholders than just the public sector, and there are also commercial scenarios, so algorithm monitoring such as algorithm evaluation systems are also applied to algorithm regulation in commercial scenarios such as platforms and enterprises [4]. In response, the United States has established algorithmic accountability with a view to controlling algorithmic decision-making through external regulation and holding platforms accountable, while also preparing specific algorithmic accountability legislation. Algorithmic accountability is intended as an ex post legal regulation, which is to hold the appropriate subjects accountable for the algorithms they provide after the damage results have occurred [9]. Although algorithmic accountability is an ex post regulatory path, algorithmic accountability system is an accountability mechanism with algorithmic assessment and supervision by external experts, professional institutions, administrative organs, etc. [7], it is also necessary to ensure the obligations of algorithm providers at different stages and the legitimate rights of the public at different stages to ensure the rationality of algorithmic decision-making. Therefore, in the establishment of algorithmic accountability, the United States, from the perspective of due process, not only emphasizes the supervision of algorithmic decision-making by external professional forces, but also ensures that the public supervises the algorithm before, during, and afterwards.

The Algorithmic Accountability Act, introduced in the United States in 2022, is an update to the Algorithmic Accountability Act of 2019. It aims to bring new transparency and oversight to software, algorithms and other automated systems, such as requiring platforms to assess algorithm discrimination, validity, etc. when using algorithms to automate decision-making. In addition to this, the U.S. has established a core governance structure for algorithm accountability through numerous pieces of legislation, all of which emphasize the establishment of algorithm evaluation systems to evaluate and regulate algorithms through external experts, professional bodies, and administrative agencies. In the algorithm assessment system, the U.S. adopts a combination of self-assessment and government assessment to be conducted, with the administrative agency promulgating and formulating the standards and rules for assessment, and then the

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platform conducting self-algorithm assessment in accordance with the standards of the Act. And the legislator constructs core assessment indexes with technical design efficiency and application purpose legitimacy, technical architecture complexity, type of tasks performed by the system, data usage characteristics, technical ownership, technical operation monitoring mechanism, system interpretability, system accuracy, technical and physical safeguards, etc. [10].

### **3.2. Based on industry self-regulation**

In terms of the regulatory system, it has been the practice in the United States to regulate the private sector primarily through self-regulation. For example, Google's "AI Ethics Committee" is dedicated to establishing ethical guidelines for the application of algorithms and correcting the possible negative consequences of algorithms [11]. Another example is that in order to strengthen the self-regulatory regulation of algorithmic discrimination, the American Computer Society has issued seven basic principles on algorithmic transparency and reviewability, which provide good standards for the regulated operation of algorithmic decision-making [12]. It can be seen that the regulation of social media algorithms in the United States relies on industry self-regulation to establish ethical guidelines for algorithms. At the same time, these industry norms can avoid excessive government intervention in algorithm regulation, which is conducive to the healthy development of platforms and algorithms.

### **3.3. Emphasis on the protection of freedom of expression and democratic politics**

In the algorithmic age, there is widespread concern in the United States about the threats to free speech in multiple directions and the further impact on democratic politics as a result of compromised speech. Balkin argues that in the past, the First Amendment to the U.S. Constitution protected citizens' freedom of speech, but with the growth of the Internet, individuals face the threat of control and surveillance by big data, and platforms attempt to use First Amendment arguments to defend their "platform power" for algorithmic manipulation and surveillance, in which individuals also face. In the midst of this, individuals also face the threat to freedom of expression posed by private governance of platforms and new regulation [13]. In this context, the United States is gradually focusing on the regulation of platforms and the protection of individuals' "digital due process. The banning of Trump by platforms such as Facebook and Twitter marks a whole new phase in the understanding and regulation of platforms, and the creation of Facebook's oversight board in response to the growing controversy over free speech and content management is almost the ultimate in platform "anthropomorphism," marking the beginning of platforms creating their own constitutions, supreme courts, and judicial review. Supreme Court and judicial review [14].

## **4. Implications for China from the administrative regulation of social media algorithms in the EU and the US**

In the era of algorithms, how to regulate the content of social media platforms and how to regulate the platform power of social media is a difficult problem faced by all countries, the EU and the United States are richer in theory and practice in network content management and network regulation, which has a certain reference value for exploring

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the regulation of social media algorithms in China. In this regard, the author puts forward the following three suggestions for the regulation of social media algorithms in China.

### **4.1. To build a diversified regulatory model**

The trend of flattening the network society from "hierarchy" [15] has led to new problems in traditional network social governance, so we should actively promote the flattening governance of social platform information and algorithm technology, that is, we should let multiple stakeholders participate and get the opportunity to express their interests. The main body of algorithm regulation in China is mainly the administrative authorities, which has not yet formed a pluralistic regulatory model and lacks the substantial participation of other subjects. In response to the dilemma faced by the main body of algorithm regulation in China, we can learn from the EU's collaborative regulation model and the US's industry self-regulation model to establish the pluralistic regulation of algorithms in the Chinese environment. In the dimension of participating subjects, the participating subjects mainly include the government in a broad sense (including the legislature, the regulatory department as the regulator, the administrative organs or agencies that cooperate with the regulation, the judiciary, etc.), the professional institutions and experts involved in the regulation process, the algorithm application platforms, the algorithm designers, the algorithm application developers, the algorithm users, the users of the algorithm applications up to the public, etc [16]. In this process, attention should be focused on the synergistic regulation between administrative regulators and other subjects. Firstly, the legal status of other regulatory subjects needs to be clarified, and the authority to regulate multiple subjects should be clearly given so that their regulation has a legal basis; secondly, the scope and boundary of regulation between different subjects needs to be clearly delineated to provide standards and norms for the regulation of other subjects; finally, in terms of accountability, the responsibility that different subjects should bear after violating the regulatory rules should be reasonably determined.

### **4.2. Explore the hierarchical and categorical regulation of social media**

As large social media platforms become the main public bridge for information sharing and online communication, they possess "quasi-public power" and exert greater influence. On top of this, China can refer to the regulatory measures of the EU and the US and explore the hierarchical and categorical regulation of social media platforms.

On the one hand, according to the idea of grasping the big and decentralizing the small, different regulatory models and platform responsibilities should be set for platforms of different scales and influence. China should set up classification standards for social media platforms according to their roles, scale and influence, and classify social media platforms. Then classify the responsibility of social media platforms, so that the scale matches the responsibility. One is that large social media platforms should bear more and stricter responsibilities while enjoying the benefits brought by their status to prevent large social media platforms from monopolizing the market. Secondly, medium-sized or small social media platforms should bear correspondingly less responsibility in order to protect small and medium-sized platforms to enjoy a fair competitive status, promote the development of small and medium-sized platforms, and maintain a good

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competitive market environment. On the other hand, the large social media platforms should be subject to key supervision to improve the anti-monopoly level of large social media platforms. At present, China's anti-monopoly has the problems of insufficient professional talents and limited law enforcement resources, and large social media platforms are developing rapidly and have a large influence, so the government should increase the construction of anti-monopoly for large social media platforms. Specifically, antitrust agencies should continue to strengthen professional capacity building, especially in upgrading regulatory technology, improving enforcement tools, and building a team of enforcement experts [17].

#### **4.3. Strengthen the whole process of regulation of social media algorithms**

For the regulation of social media algorithms, should be carried out before, during and after the whole process coverage of dynamic supervision, there is currently a lack of algorithm regulatory process in China, algorithm accountability is not clear, should strengthen the whole process of social media algorithm supervision.

In advance, prior application and approval should be made, then the algorithm filing system in prior regulation should be implemented. China officially released on December 31, 2021, the "Internet information service algorithm recommendation management regulations" put forward the "algorithm filing" program. Algorithm filing is essentially to enable the obligated subject to file with the administrative organ for inspection, and to provide an information basis for post-event accountability by way of prior filing, in order to consider the subjective fault of the algorithm service provider. As far as the algorithm filing obligor is concerned, algorithm filing is an important way for it to realize its obligation to fulfill the transparency of algorithm, and through the disclosure of information to the regulator, it reduces the adverse effects caused by the complex nature of the algorithm itself, the technical difficulty of the algorithm, and the deliberate concealment of the algorithm service provider [18]. To ensure the smooth implementation of the algorithm filing system, on the one hand, the support of the platform ecology is needed to establish smooth technical communication channels with government agencies and take the initiative to make rational information disclosure and algorithm explanation; on the other hand, the reasonable use of algorithm regulation technology such as regulatory sandbox, algorithm simulation and preview, and the establishment of algorithm impact assessment system are also needed. Complementary strengthening in enhancing algorithm transparency, safeguarding individual due process rights and strengthening public scrutiny [19].

In the middle of the matter, it is mainly to supervise the algorithmic procedures. In this process, it is necessary to avoid causing algorithm discrimination, algorithm error, algorithm manipulation and other potential hazards brought by the algorithm, and to ensure that the algorithm cannot violate the user's privacy when collecting user information, and to protect the user's right to know and information choice. Therefore, the operation and update of the algorithm should be under the control of the whole regulatory system. In addition to self-regulation by the social media platform, it is also necessary to set up a special outside regulatory body for supervision. This requires external regulatory bodies to review and supervise the legitimacy of algorithm procedures, require platforms to disclose algorithms, ensure the transparency and accountability of algorithms, and urge platforms to design algorithms that are more trustworthy to users.



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Post-event supervision requires the establishment of algorithm accountability and relief mechanisms. Improve the accountability system, consider the subjective fault of the corresponding subject in different stages, and implement the legal responsibility of the subject being held accountable according to the prior filing system. At the same time, in the post-facto administrative accountability process, it needs to comply with the principle of due process to ensure that the platform has the right to redress. In addition, social platform algorithms involve a large number of users, a wide range of infringement, and may further threaten the public interest. Individual users often choose to give up their rights because of the small damage to their rights and interests, the difficulty of collecting evidence, and the time needed to defend their rights. In this regard, a public interest litigation mechanism can be constructed to help users defend their rights and safeguard their legitimate rights.

### 5. Conclusion

The development of algorithm technology has changed the way users input information and output information in social media, which not only brings users a new and good experience, but also brings technical, ethical and legal problems, making social platform algorithms gradually become the focus of attention of regulators in various countries. Therefore, this paper focuses on the social media scene and draws on the experience of the EU and the US in platform regulation and algorithm regulation to explore the regulatory measures that China should take for social media algorithms. At the same time, China needs to make a judgment on the choice of the path of social media algorithm regulation, taking into account its own national conditions. At present, the regulation of social platform algorithms in China mainly suffers from the lack of regulatory process, the lag of regulation, the lack of detailed regulatory process and regulatory rules, and the lack of scenario-based regulation. In this regard, this paper puts forward suggestions in terms of constructing a diversified regulatory model, strengthening the graded and classified regulation of social media platforms, and improving the whole process of platform algorithm regulation. The refinement of the specific system still needs further exploration in theory and practice.

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