

A study on the meta-regulatory model of Internet platforms in the view of algorithmic governance

Qianyu Wang

College of law, Zhengzhou University, 450001, Zhengzhou, Henan, China

Abstract. Meta-regulation is a regulation model that retunes the ability of self-regulation, which can take full advantage of the information and resources possessed by the regulated, is more sensitive to the market situation, and can enhance the incentive of the regulated to comply with the rules. Therefore, it is suitable for the regulated that is complex and in a dynamic evolutionary state. The uncertainty of algorithmic risk breaks through the ability of the traditional regulation model, while the meta-regulation model is a reference paradigm. The meta-regulation of platform algorithms has the characteristics of reflexivity, and the procedural regulation required by it can be achieved in three aspects: authentication system, transparency and accountability. Meta-regulation of platform algorithms is not limited to regulating the management of the platform itself and external regulation by the government, but should also empower third-party organizations to play a role in establishing high standards of industry compliance and creating value through meta-regulation by taking advantage of their concentrated technical and professional resources. The relationship between public and private subjects that are interconnected and mutually supportive is the development trend of platform algorithm governance in the future.

Keywords: Algorithmic governance; Meta-regulation; Self-regulation; Government regulation; Third party organizations.

1. Introduction

With the evolution of the factors of production, we are gradually transitioning from the "information age" of the Internet to the artificial intelligence age of "data & algorithm". Algorithms have become the new technical support for Internet platforms. The traditional regulation model requires the regulator to invest resources, and once the regulator does not have the corresponding ability, it will have negative consequences. Each platform uses different algorithms. Due to the abstraction and professionalism of technology and the uncertainty of algorithm risk, it is difficult for the government to regulate algorithms from outside in a universal and definite form, while platforms have professional regulation resources, which can overcome the obstacles encountered by government regulation. Thus, self-regulation of platforms in the field of algorithm governance is still necessary for China to respond to the problem of insufficient administrative resources and share the cost of governance. "Algorithm" refers to a step-by-step description of the solution to a particular problem, representing a systematic approach to describe the strategic mechanism of problem solving. The "governance of algorithm" in this paper refers to the participation of multiple subjects in managing the process of making decisions using algorithm technology and the power of algorithm. Since platforms are inherently profit-seeking, their power is destined to alienate or even counterproductively detract from the power or rights of other subjects, so it is essential to re-regulate the self-regulation of platforms. The prevention of algorithmic risk is inseparable from the participation of government departments, but also requires the platform to play its management role, whereas the reflexive nature of meta-regulation is what breaks the dualistic thinking of the opposition between public law and private law, and helps different regulatory subjects learn from each other.

Current academic discussions on the meta-regulation model mostly focus on the environment and food fields, with less attention to vision in the field of algorithm governance. Related studies mainly advocate the establishment of specific norms and emphasize the government's supervisory role to limit platform power. For example, in the meta-regulation of marketing communication algorithms, the government is used as the main force for external regulation, urging algorithm controllers to regulate their self-regulation of algorithms with the force of government coercion. The institutional

response of meta-regulation stems from the concern of "risk society", but past studies have not paid enough attention to the technical characteristics of algorithms. This paper intends to explore how to realize the organic combination of public power and private power in the field of platform algorithm governance with the meta regulation theory, integrating the technical resources in the industry so as to make up for the lack of intelligent resources for government regulation and promote platform algorithm compliance.

2. Theoretical Framework Of Meta-regulation

2.1 Theoretical connotations of meta-regulation

Meta-regulation, or regulated self-regulation, is also known as enforced self-regulation, which means that the self-regulation of non-governmental organizations is again subject to external regulation and supervision by other subjects, with the corresponding responsibility shifted from the traditional regulator to the regulated. Its ultimate goal is to achieve organizational self-reflection on the effectiveness of its own controls. The platform is a coupling of private and public nature. Algorithms not only drive business interests, but also serve as tools for platform management of users, thus in many cases, algorithms are "agents" of the platform, with technical and economic attributes as well as strong social attributes, and their development and application must meet the requirements of social responsibility. In the algorithmic governance perspective, the platform's self-regulation refers to the behavior of the platform's algorithmic compliance, while the object of meta-regulation is the process of such regulation itself, that is, the regulation of the procedural conditions of self-regulation

Traditional regulation consists of government regulation and self-regulation, the former being a top-down model of regulation by administrative agencies, while the latter requires the sameness of the regulator and the object of regulation. The meta-regulatory theory relies on reflexive law, which aims to achieve joint governance of public and private subjects, but it differs from the traditional regulatory approach in which government and industry bodies cooperate. On the one hand, the government plays the role of "paddler" in the traditional regulation and carries out direct regulation, while in the meta-regulation model, the role of the government becomes "steerer", a kind of "regulation at a distance", which gives more discretionary space to the regulated. On the other hand, unlike traditional self-regulation, which is often motivated by the voluntary and spontaneous initiative of the subject, meta-regulation is mainly motivated by external coercive requirements that urge the regulated organization to respond to external regulatory pressures. The main difference between the two is the difference in the direct purpose of the external threat. A governance tool is meta-regulatory when it has the direct purpose of promoting self-regulation, and vice versa.

The regulated have different residual powers of self-control under different regulatory models. From "traditional regulation" to "meta-regulation" to "self-regulation", the space for autonomy of the regulated has been expanding. All regulatory tools cannot be achieved without the self-discipline of the regulated. In an orderly society, predetermined rules cannot be exhaustive nor can inspectors monitor everything, so self-control by the regulated is a necessary element.

2.2 Application basis of meta-regulation

In traditional regulation situations, the regulator is able to give universal, mandatory standards, in knowing information about the risks of the target of the regulation, and only if there is sufficient similarity between the targets of the regulation. However, if the above conditions cannot be controlled by the regulator, meta-regulation may be an alternative strategy. From the perspective of social systems theory, there is an independent logic of operation among the various subsystems, and the legal subsystem does not have the power to interfere directly with the other subsystems. The regulated in meta-regulation have more discretionary power than in the traditional regulation model. They have the superiority in information or resources compared to external regulators, are more likely to make

reasonable rules, in which they will have a higher degree of agreement. As such, the meta-regulatory model can be used to address the problem of logical incompatibility between subsystems, whereby the discretionary space exists precisely to regulate the risk of instability. But self-regulation is bound to conflict with the private interests of the regulated party. The difficulty in applying the meta-regulation model is precisely how to ensure that the regulated is able to overcome the temptation of private interests in some cases and finally achieve the public interest purpose. Thus, the basis for the application of the meta-regulatory model depends on the availability of a number of elements. First, there is an information or resource bias between the regulator and the target of the regulation, of which the latter is the dominant party. Second, the regulated party has the capacity to assume the responsibility of regulation. Third, it is the regulated party that has a sustainable incentive source for self-regulation. Meta-regulation is essentially about limiting the freedom to self-regulate through a series of procedural norms. While directing self-regulation, the meta-regulator evaluates the achievement of regulatory goals and continuously revises the regulatory instruments, leading to a reasonable distribution of public and private power structures.

3. The Possibility Of Platform Algorithm Meta-regulation

Algorithmic governance has become a global issue, but it is clear that traditional regulatory approaches are ill-equipped to deal with the uncertainty of algorithmic technology risks. The platform holds a large amount of resources and information, forming "platform power" and possessing the ability of self-regulation, which is in line with the application basis of meta-regulation theory. And liberal and mandatory nature of meta-regulation can better promote the goal of self-regulation of platforms.

3.1 Functions and limits of government regulation algorithms

The government, as the main player in our algorithmic governance, has an irreplaceable position in algorithmic governance, but there are also many limitations. Firstly, the rules that the government relies on have the property of "hard law", but the existing laws are very abstract and not very operative, whether they regulate the behavior or the results of the platform algorithm. Recently, with the advancement of cyberspace governance, China's algorithm governance is in the stage of accelerating from "soft law" to "hard law". The regulations on algorithms in China are scattered in several laws. A legal regulation system of algorithm governance is taking shape with the "Network Security Law", "Data Security Law" and "Personal Information Protection Law" as the main body, and the "Internet Information Service Management Measures" and "Internet Information Service Algorithm Recommendation Management Regulations" as useful supplements. However, the relevant rules are all mainly focused on the post-facto passive supervision of the platform, lacking refined platform specifications and technical specifications. Government regulation is like a "boulder" to plug the loopholes of algorithmic risk, but it is impossible to do everything, and the gaps beyond the "boulder" still need to be filled. Moreover, because of the existence of the "algorithmic black box" and objective factors such as professional capacity, it is difficult for the government to make early judgments on algorithmic risks, and the relevant rules are often updated with the actual development and changes. Secondly, the "hard law" provides for a single penalty, mainly fines and interviews and other measures, which are not severe enough and may not achieve the purpose of punishment. As a result, the government plays the role of a passive regulator, unable to fully control the risk of platform algorithms. What the government can do is to set a holistic framework of basic rules on which platforms are required to make generalized and standardized regulations.

3.2 Complements and pitfalls of platform self-regulation

Compared with government regulation, there are certain benefits of self-regulation of platforms. For the field where the pioneers are the first to enter, it is necessary to make up for the system by

themselves. Algorithmic technology has become the new technical architecture of the Internet platform, and the platform is at such a stage where it needs to exert its subjective initiative.

The platform's advantage in professional ability and technical resources makes it have richer tools for regulating algorithms, which can not only evaluate the whole process of the algorithms it uses, but also develop technical regulation tools. In addition, the self-regulation of the platform promotes the fulfillment of the soft law of regulation, and the internal rules of the platform do not resort to state coercive power, thus possessing greater flexibility, which not only can include more personalized standards, but also can adopt more diversified punitive measures. In the face of volatile algorithmic risk, technical details are a difficult problem for governments to crack. The pattern of government-led rulemaking has developed to a bottleneck period, while the platforms themselves have more centralized governance resources and are closer to algorithmic risk and can react in a timelier manner.

However, there is a self-interest trap in the platform's regulation of its own algorithm. The platform, as a product of economic development, has an inseparable profit-seeking nature, so that the platform power is destined to sacrifice public interests in exchange for the realization of the interests of private subjects. Consequently, the self-regulation of platforms inevitably involves a discussion of the trade-off between the contradictions of public and private interests. For one thing, the technical threshold of the algorithm itself creates a hidden environment for the platform to pursue private interests internally, and it is difficult for non-professionals to recognize or judge the risks in the design and operation of the algorithm. Besides, the platform, with its resources and data monopoly position, has gained a strong voice and is more likely to squeeze or sacrifice the legitimate rights and interests of users in order to obtain the benefits brought by information asymmetry. So, it is necessary to re-regulate the self-regulation of the platform.

3.3 Conformity of algorithmic meta-regulation with the existing legal system

The application of algorithmic meta-regulation is not without a relevant legal system foundation in China. The legislation of algorithms in China is still in its early stage, and the meta-regulation theory can even be directly grafted on the existing legal system for development. Legislators and relevant administrative departments have already seen that the professionalism and technicality required to govern algorithms is beyond the scope of our existing intelligent administrative resources, shifting to emphasize the self-regulation of the industry as a way to share the pressure of government regulation. The conformity of algorithmic meta-regulation with the existing legal system is mainly reflected in the following two aspects.

Firstly, algorithmic meta-regulation gives enterprises more space for self-regulation which helps to break the current pattern of "strong regulation and weak self-regulation" in the field of algorithmic governance in China. Owing to the difference in the development of domestic and international intelligence levels as well as the inherent technical threshold of algorithms, China's algorithmic governance administrative resources are relatively scarce. The requirement of platform algorithm self-regulation is clearly manifested in the "Regulations on the Administration of Algorithm Recommendation for Internet Information Services" promulgated in 2022, whose Article 5 clearly indicates the attitude of encouraging relevant industry organizations to strengthen self-regulation. Thus, it can be seen that the platform's self-regulation of algorithms has been absorbed by our laws.

Secondly, the algorithmic meta-regulation requires the regulated enterprise to bear the corresponding consequences, in line with the legislative trend emphasizing the main responsibility of the platform. Meta-regulation chooses a different model from traditional regulation, one that assigns responsibility to the object of regulation itself. The core of the main responsibility of the platform is to conduct sufficient "private censorship", which means the dominant role and control power of the platform for the production of digital society. 2021 China's General Administration of Market Regulation drafted the "Guidelines for the Implementation of the Main Responsibility of Internet Platforms (Draft for Comments)", which clarifies the main responsibility of different types of platforms. As large platforms and mega platforms have advantages in user scale, data, technology and other aspects, the draft requires mega platforms to assume higher responsibilities and obligations,

play a leading role in fair competition demonstration, comply with the principle of non-discrimination, and not to implement self-preferential treatment and other behaviors. Such requirement of "the greater the capacity, the greater the responsibility" for the platform coincides with the meta-regulatory theory of responsibility allocation. The meta-regulatory theory advocates assigning responsibility to those subjects who are capable of bearing it, and these subjects should satisfy two conditions. One is the motivation to take the initiative for social responsibility, and the other is the availability of strong resources and a complex organizational structure. And the practical judgment also shows the enhanced responsibility of the platform, in China's first algorithmic recommendation case, the court held that even if the platform has taken measures to remove, if the infringing information still exists or remains in the platform's information storage space, the platform is obliged to further take necessary measures such as blocking content, keyword filtering, banning accounts, etc. to stop the infringement from continuing in accordance with the requirements of the Civil Code.

4. Model construction of platform algorithm meta-regulation

The power of the platform to regulate algorithms has two sources: the first is the self-restraining dominance of the power inherent in the platform's possession of algorithmic power; the second is the government's delegation of power to the platform in response to its inadequacy in regulating algorithms. In essence, the meta-regulation of platform algorithms is asking for the regulation of "algorithmic power" and "power granted by the government to the platform". Meta-regulation is characterized by reflexivity, with its procedural norms as a medium that requires reconfiguring the structure of public and private power. In this regard, the procedural specification of the platform algorithm meta-regulation model can be considered in three aspects: certification system, transparency, and accountability, to build a good regulatory structure and comply with the market law of Internet industry development.

4.1 A source of motivation to achieve public goals: certification norms

All regulatory tools are designed to promote the self-regulation of the target of regulation, while platform companies, as economic organizations, self-regulate in contradiction with their nature. The meta-regulation model requires it to improve the normative nature of self-regulation, requiring enterprises to increase costs in related technology research and expert hiring, etc. For example, foreign video platforms such as YouTube have introduced technologies such as Content ID to block content involving copyright infringement; Tencent uses differential privacy technology to achieve better risk management capabilities and personal privacy protection; Meituan has established an AI governance expert committee, etc. Therefore, the meta-regulator needs to implement measures from the outside to directly contribute to the realization of corporate self-regulation. Due to the profit-seeking nature of enterprises, the incentive can only arise if the benefits that enterprises can foreseeably obtain are higher than the costs they actively spend on algorithmic compliance. To achieve this goal, the meta-regulator needs to seek a point of coexistence between public interest and corporate interest.

The reason why companies win goodwill is that their actions meet the general standards of the public and achieve the public interest. Goodwill will also help companies gain more financial benefits, and large companies tend to care more about maintaining reputation. So, meta-regulators can use goodwill enhancement as an incentive to encourage firms to self-regulate, with special emphasis on the exemplary role of large platforms. Based on the above analysis, the meta-regulator can establish certification norms, and by analyzing the results of self-regulation of enterprises, award official certification to enterprises with good compliance results and publicize them. This reputation mechanism is used to distinguish enterprises from other competitors, thus increasing their recognition in the public mind and motivating them to self-regulate.

4.2 Self-regulatory oversight approach: transparency norms

The legitimacy of such self-regulation can be explained with the help of the relevant theory of contract, as the platform assumes the underwriting and joint and several responsibilities for the violation of the obligation to review and control the internal related activities. Because self-regulation is essentially a manifestation of the autonomy of private subjects, it belongs to the scope of private law, and its legitimacy comes from the agreement of both parties. In further words, the platform's right to regulate users and internal operators comes from the user agreement or other similar form contracts reached between the two parties. At the same time, the platform algorithm technology put into commercial operation is no longer neutral. Algorithms, as the main technology supporting the effective implementation of platform rules, in a sense gain the ability to control people's interests in general, creating algorithmic power held by the platform, further contributing to the platform's own management power. Besides, the government does not have sufficient resources for governance in the face of the massive amount of information and transactions, so it needs to delegate some of the public law censorship rights to the network service providers. Based on this, the platform obtains its own management right and the public law censorship right granted by the government.

If there is a lack of supervision, there is a possibility for the platform to abuse the above power. On the one hand, the platform should formulate reasonable user agreement and privacy policy, and establish a set of perfect algorithm and manual processing of platform order management mechanism. On the other hand, the platform needs to make the management standards public and also provide direct complaint or grievance channels for the targets of the platform regulation. In addition, the most direct response of the existing legal system to algorithm transparency is reflected in the "algorithm filing system" in Article 24 of the "Regulations on the Administration of Algorithm Recommendations for Internet Information Services". On this basis, companies should implement a filing system and take the initiative to disclose sufficient information about the algorithm to the regulatory authorities to ensure smooth external supervision.

4.3 Justification and Legitimacy of Regulatory Standards: Norms of Accountability

Accountability will be affected by the legitimacy and legality of regulatory standards. In the meta-regulatory model, the government is no longer the only regulator, but individuals, associations, or other non-governmental organizations may be involved in the formulation of standards. The authority of standards set by the legislature or government agencies authorized to legislate is self-evident. However, the legality and legitimacy of the standards set by third parties with their professional competence are yet to be answered. In the regulatory system, setting and implementing standards are two independent processes, and both can obtain stronger accountability as long as one of them meets the requirements of legality and legitimacy. For example, the accountability of standards set by nongovernmental entities is weak, but if the implementer of the standards is the state, there may be a stronger accountability mechanism. The meta-regulation of platform algorithms is responsible for the rules made by companies and submitted to the meta-regulator for review. As a private subject, the accountability of the rules made by the platform is weak, so the meta-regulator can enhance the accountability of the standard by increasing the authority of the standard implementation. The implementation of standards is mainly tested by assessing the quality of self-regulation, but the administrative organs themselves lack the relevant professional capacity, which can be solved by the administrative entrustment system. The purpose of the initial setting of the administrative entrustment system stipulated in Article 26(5) of China's Administrative Procedure Law is to solve the legitimacy crisis of the exercise of public power by social organizations. Therefore, it is reasonable for a social organization with professional resources to conduct the assessment of platform algorithm self-regulation on behalf of the administrative authority. The government commissions industry associations or other third-party organizations to conduct the evaluation, solving the problems of high technical threshold and high cost of regulation encountered by the government. Finally, the third-party organization will feedback the evaluation results to the government, making the government's ability to regulate continuously revised. In the meantime, the government will give feedback on

incentives or penalties to promote the continuous optimization of platform self-regulation. However, it should be paid attention to the dual role played by the third-party assessment organization, which is the voice of not only the government but also the enterprises, and the large amount of resources converged by the third-party organization often originate from and may be manipulated by the platform giants. Therefore, it is also imperative to build a legal and reasonable, fair and efficient scoring mechanism in the assessment process.

Combined with the "winner-takes-all" business ecology of the Internet industry and the attitude of legislators in various countries to strengthen the regulation of super platform behavior, it is often the big platforms that are facing huge external compliance pressure and gaining more revenue at the same time. Hence, the large and mega platforms in the meta-regulatory model will also become the main channel for the organization and regulation of the state governing body. It is necessary for government regulators to encourage large and mega platforms to support third-party organizations in the development of algorithmic compliance tools through positive publicity and other incentives, and to share the compliance costs that small and medium-sized enterprises may not be able to afford. Regulating platform algorithms is an important part of China's Internet industry optimization, which helps regulate platform information content and protect the rights of the public. And it is also necessary for enterprises to assume social responsibility and international compliance of algorithms. Using a third-party assessment organization as a medium, platform enterprises contribute standards and technologies, with feedback from the assessment organization open to the public, making high evaluation of platform self-regulation results an element of commercial competition, thereby building an ecology that realizes complementary private and public interests of enterprises and becomes a source of motivation for self-regulation.

5. Conclusion

There are no advantages or disadvantages between different regulatory tools, and the choice of a regulatory tool is mainly based on the applicability in comparing specific situations. Compared to traditional regulation, the meta-regulatory model has more obvious advantages in the field of algorithmic governance and can also be directly transposed to the development of existing legal systems. The discretionary space given to platforms by meta-regulation allows them to make various rules according to their own business models and technical characteristics. This can also contribute to the wisdom of national legislation and judicial authorities in dealing with disputes, and help the government regulation to be continuously improved. Moreover, the meta-regulator exerts influence from the outside through institutional design, requiring enterprises to strengthen self-regulation, and using the coercion of external rules to eliminate the contradiction between the interests of enterprises and the public interest. Based on the construction in authentication norms, transparency norms, and accountability norms, governments, platforms, individuals, and third-party organizations can be included in the scope of the meta-regulatory model, playing their respective regulatory roles to achieve the goal of public interest. The interconnected and mutually supportive relationship between public and private subjects should become the future trend of platform algorithmic governance.

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