

The Perfect Path of Data Elements Circulation from the Perspective of Separation of Powers

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ABSTRACT

From the perspective of separation of powers, this paper deeply analyzes the strategic path to optimize the circulation of data elements. The introduction of the three-power separation system is intended to break the obstacles of the market-oriented reform of data elements and build a set of data property rights system framework in line with China's national conditions, which has far-reaching strategic significance. At present, the circulation of data elements is facing a series of challenges, including complex property rights confirmation, difficult value evaluation, weak trust foundation, high market access threshold and difficult supervision. In order to effectively deal with these challenges, we need to improve from four aspects: first, improve the data property rights system, clarify the ownership of property rights, and strengthen the legal protection of data property rights; The second is to build an efficient data circulation and trading system, which includes formulating clear trading rules, cultivating an active trading market, and strengthening the construction of data quality standards to ensure the quality and reliability of data; The third is to promote the fair distribution of the income of data elements, not only to establish a reasonable income distribution mechanism, but also to stimulate the innovation power of the market; The fourth is to strengthen the supervision and governance of the data factor market, improve relevant laws and regulations, and form a collaborative governance pattern in which the government, enterprises and society participate together.

KEYWORDS

separation of powers; Data circulation; digital economy

With the rapid development of digital economy, data has become a key factor of production, and its importance has become increasingly prominent. However, the circulation of data elements is facing many challenges, such as the difficulty of data confirmation, pricing, mutual trust, admission and supervision. In order to solve these problems, the Central Committee of the Communist Party of China and the State Council issued the Opinions on Building a Data Basic System to Give Better Play to the Functions of Data Elements (hereinafter referred to as "Article 20 of Data"), which innovatively put forward a data property right system framework of "separation of three rights" for data resource holding right, data processing right and data product management right.

This paper will explore the perfect path of data element circulation from the perspective of separation of powers, in order to provide useful reference for promoting the prosperity and development of data element market. Introduction: With the rapid development of digital economy, data has become a key factor of production, and its importance has become increasingly prominent.

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1 The framework of the three-power separation system in "Article 20 of Data"

1.1 Necessity level: the market circulation of data elements is blocked

The background of the "separation of powers" system stems from many challenges faced by the circulation of data elements in the digital age. In today's digital era, data has become a new engine to drive economic and social development, and its importance has become increasingly prominent. However, the circulation of data elements is not smooth sailing, but faces multiple problems such as difficulty in confirming rights, pricing, mutual trust, admission and supervision.

These problems, like heavy shackles, seriously hinder the free circulation and value release of data elements, making the huge potential of data far from being fully exerted.

1.2 Feasibility level: the innovative system design of "Digital Twenty Articles"

In order to solve these thorny problems and promote the compliance and efficient utilization of data elements, "Twenty Articles of Data" came into being, and innovatively put forward a data property right system framework of "three rights separation" of data resource holding right, data processing right and data product management right [1]. This institutional framework is put forward to promote the legal circulation of data and the full release of value by clarifying the ownership and power of data property rights. Specifically, the ownership of data resources clarifies the ownership of data and provides a basic guarantee for the legitimate use of data; The right to use data processing gives data processors the right to process and analyze data, which promotes the value-added and utilization of data; The right to operate data products allows data products to circulate in the market, realizing the economic value of data. The proposal of this institutional framework not only solves the problem of data confirmation, but also provides clear guidance for data pricing, mutual trust, admission and supervision, making the circulation of data smoother and the release of value more fully.

1.3 Legitimacy level: the balance and coordination function of data governance

The proposal of the separation of powers system has set a significant milestone in the process of market-oriented reform of data elements, which is of great value for solving the difficult problems of current reform and establishing a data property rights system framework that is in line with international standards and has China characteristics. This system keenly captures the actual demand of data development and utilization. By diluting the concept of absolute ownership of data, it emphasizes the flexible arrangement and efficient use of the right to use, which greatly promotes the free flow of data and the full display of intrinsic value.

Under the background that data is increasingly becoming a new driving force to promote economic and social development, the separation of powers system has explored a new way for the compliant circulation and efficient utilization of data with its unique system conception. It clearly defines the rights of data resource holders, processing users and product operators, which not only effectively protects the legitimate rights and interests of the original data holders, but also stimulates the innovation enthusiasm of data processors and operators, and promotes the cooperation between the upstream and downstream of the data industry chain. What is particularly crucial is that the three-power separation system directly attacks the core problems that have long hindered the development of the data factor market, such as complex data confirmation and vague pricing. By refining the power distribution of data property rights, it provides clearer legal guidance for the reasonable pricing and rights distribution of data, reduces transaction costs, enhances the confidence and expectation of market participants, and lays a solid and stable institutional foundation for the prosperity and development of data factor market.

In addition, the implementation of the separation of powers system will also help to improve the efficiency of data governance and ensure the safe and compliant use of data. While ensuring data circulation and value realization, it also strengthens the prevention, control and supervision of risks such as data abuse and privacy disclosure, which provides a strong guarantee for creating a healthy, orderly and sustainable market environment for data elements.

2 Challenges faced by the circulation of data elements from the perspective of separation of powers

Although the circulation market of data elements contains great potential, its development path is not smooth, but it faces multiple severe challenges. With the rapid rise of digital economy, the circulation market of data elements has become the focus of competition among all parties, and all localities are competing to lay out data trading platforms in order to occupy a leading position in this emerging field. However, although the market shows great vitality and great potential, it is still in the primary development stage as a whole, and a series of problems that need to be solved urgently are hindering its further development.

The first challenge lies in the problem of data confirmation, which has become a key factor restricting market circulation. Because data is easy to copy and spread, the traditional ownership confirmation method is stretched in data protection. The unclear definition of data ownership leads to frequent rights disputes in the transaction process, which seriously affects the circulation efficiency and value realization of data. Therefore, it is particularly urgent to explore a new confirmation mode, clarify the ownership of data, and provide a solid legal basis for the compliant circulation of data [2].

Secondly, the data pricing problem also plagues the market. As a new factor of production, it is difficult to accurately measure the value of data. In addition, the information asymmetry in the data market makes the pricing process more complicated and changeable. Reasonable pricing mechanism is the basis of data transaction and the key to stimulate market vitality. Therefore, it is very important to establish a scientific data pricing system and comprehensively consider the scarcity, quality and use value of data to ensure the fairness and rationality of data transactions.

In addition, the lack of mutual trust has also become an important factor hindering the efficient achievement of data

transactions. In the process of data circulation, there is a lack of effective trust mechanism among all parties, which leads to an increase in transaction costs and a decrease in circulation efficiency. In order to build a relationship of mutual trust, we must improve the credit system of data transactions, strengthen the supervision and self-discipline of trading platforms, and enhance the security and reliability of data transactions.

At the same time, high entry threshold is also an important bottleneck restricting market development. Due to the difficulties of data confirmation, pricing and mutual trust, the threshold of data element circulation market is relatively high. Many potential data providers and users cannot enter the market because it is difficult to cross these obstacles, which leads to the imbalance between supply and demand in the market. In order to lower the market threshold, we should simplify the transaction process, reduce the transaction cost and improve the transparency and accessibility of the market.

Finally, the regulatory problems can not be ignored. The supervision of data element circulation market involves many departments and fields, and it is difficult to supervise. At the same time, with the rapid development and changes of the market, it is often difficult for regulatory policies to keep up with the pace of the market. In order to strengthen supervision, it is necessary to establish a collaborative supervision mechanism, clarify the supervision responsibilities and authorities of various departments, and strengthen the formulation and implementation of supervision policies to ensure the healthy and orderly development of the data element circulation market.

3 The Perfect Path of Data Elements Circulation from the Perspective of Separation of Powers

3.1 Improve the framework of data property rights system

In the process of constructing a perfect data property rights system framework and clearly defining the ownership of data property rights, the system design of separation of powers plays a core role. This framework covers three sections: the right to hold data resources, the right to use data processing and the right to operate data products, which accurately define the rights and interests of data in different life cycle stages and application scenarios. In order to strengthen the clarity of these rights and interests, it is urgent to establish a national data element property right registration platform, and use this platform to implement data registration and confirmation to ensure that every data asset can be traced back to its legitimate owner, thus providing a solid legal cornerstone for the free circulation of data elements. The proposal of this institutional framework is not only a profound innovation to the ownership system of data property rights, but also a strong drive to the reform process of market-oriented allocation of data elements. By clearly defining the ownership of data property rights, we can fully mobilize the enthusiasm of data holders, promote the compliant circulation and efficient application of data, and then inject strong impetus into the vigorous development of digital economy.

In protecting data property rights, it is very important to build a sound data property protection mechanism. This requires constantly improving the relevant laws and regulations system, clearly defining the infringement of data property rights and their legal responsibilities, and providing strong legal support for data property owners. At the same time, it is necessary to intensify the crackdown on data property rights infringement, form an effective legal shock, and ensure that data property rights are fully respected and protected^[3].

In addition to legal means, policy guidance and market mechanism are also indispensable ways to protect data property rights. By formulating and implementing relevant policies, the government can encourage data property owners to actively participate in the data factor market and create more market opportunities and profit space for them. In addition, the market mechanism can also play an important role, encouraging data property owners to actively exercise their rights and interests through incentives such as price mechanism and competition mechanism, and promoting the compliant circulation and efficient use of data.

3.2 Establish an efficient data flow communication and transaction system

In order to promote the healthy development of the data element circulation market, we should improve the data transaction rules system, cultivate the big data transaction market, and strengthen the construction of data quality standardization system. First of all, perfecting the data transaction rules system is the key to ensure fairness, justice and openness of data transactions. Unified data transaction rules should be formulated to clarify the process, standards and responsibilities of data transaction. This includes the pricing mechanism of data, the transaction mode, the protection of rights and interests of both parties to the transaction and the liability for breach of contract, etc., to ensure that the data transaction process has rules to follow and evidence to follow. At the same time, strengthen the supervision and management of data trading platforms, establish a sound supervision mechanism, prevent data leakage, abuse and illegal transactions, and protect the legitimate rights and interests of all parties to data transactions.

Secondly, cultivating the big data trading market will help to improve the efficiency and scale of the circulation of data elements. Enterprises of all types of ownership should be encouraged to participate in the construction of factor trading

platforms and explore various forms of data trading modes, such as data auction, data leasing and data exchange, so as to meet the diversified needs of different data demanders. Through the market competition mechanism, we will promote the optimal allocation of data resources and improve the efficiency and value of data use. In addition, we should strengthen market propaganda and promotion, improve the market's understanding and acceptance of data transactions, and attract more data providers and users to participate in the transactions.

Finally, strengthening the construction of data quality standardization system is an important guarantee to reduce the risk and cost of data transaction and promote the healthy development of data element circulation market. We should explore the standardization of data quality and formulate unified data quality standards and norms, including data collection, storage, processing, analysis and application. Through standardization construction, the quality and credibility of data can be improved, and the uncertainty and risk in data transaction can be reduced. At the same time, we should also strengthen the publicity and training of data quality standards, improve the quality awareness of data providers and users, and promote the full implementation of data quality standardization system^[4].

3.3 Promote the rational distribution of data element income

On the one hand, it is to build a fair and reasonable income distribution system. In the initial distribution, it is necessary to adhere to the principle of "distribution according to input and contribution" to ensure that the input parties and contributors of data elements can get corresponding returns according to their actual efforts and achievements, so as to maintain the fairness and operational efficiency of the data element market. When we enter the stage of secondary distribution or even tertiary distribution, we need to pay more attention to the public interests and the interests of vulnerable groups, and ensure that the dividend of digital economy development can benefit a wider range of social groups with the help of a reasonable redistribution mechanism. In addition, it is necessary to closely monitor and regulate the excessive expansion of capital in the data field according to law to prevent potential risks such as market monopoly and lay a solid foundation for the steady and sustainable development of the data factor market.

On the other hand, stimulating the innovation potential of the data factor market is the key driving force to promote its sustainable development. The government should play a leading role in policy and provide solid support for the innovation and development of the data factor market. For example, enterprises and individuals who have performed well in the field of data circulation and trading are commended and supported, so as to encourage market players to actively participate in innovation practice. At the same time, encourage technological innovation and model innovation, promote the data factor market to continuously glow with new vitality, and improve the utilization efficiency and value transformation ability of data resources. This deep integration of policy and market mechanism will form a powerful driving force to help the data factor market enter a new stage of sustained prosperity and development.

3.4 Strengthen the supervision and governance of the data factor market

In order to promote the steady progress of the data factor market, it is urgent to accelerate the construction of an all-round, efficient and collaborative governance structure. The core strategy of this framework includes two aspects: on the one hand, it is necessary to quickly establish and improve the laws, regulations and policy framework of the data factor market, clearly define the regulatory subjects and their responsibilities, as well as specific regulatory means, so as to provide a solid legal cornerstone and institutional backing for the orderly operation of the market. By strengthening the popularization and training of legal knowledge, we will continuously improve the legal awareness and compliance ability of market participants and ensure the effective implementation of various policies and regulations.

On the other hand, we should actively promote the formation of a new governance model in which the government, enterprises and social forces participate and cooperate closely. The government should play a leading role, strengthen the supervision of the data factor market and ensure the standardized and orderly market environment; Enterprises should actively fulfill their social responsibilities, strictly abide by the relevant laws and regulations on data security and privacy protection, and effectively protect the rights and interests of users; At the same time, the power of social supervision is equally important, so we should make full use of its supervision function to promote the data factor market to move forward steadily in fair competition and healthy development. Through the continuous improvement of laws and regulations and the deepening of multi-party collaborative governance model, we will jointly lead the data element market into a new stage of more standardization, rule of law and health^[5].

4 Conclusion

The proposal of the separation of powers system provides a new idea and a new path for the improvement of the circulation of data elements. By improving the system framework of data property rights, establishing an efficient data

flow communication and transaction system, promoting the rational distribution of data element income and strengthening the supervision and governance of data element market, we can effectively solve many challenges faced by data element circulation and promote the prosperity and development of data element market. In the future, with the continuous development of digital economy and the continuous progress of data technology, the circulation market of data elements will usher in a broader development prospect.

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