

New Quality Productive Forces Empowering Digital Taxation Governance: Driving Mechanisms, Internal Logic, and Implementation Pathways

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Abstract: With the development of the digital economy, new quality productive forces have been formed based on technological innovation, data empowerment and industrial transformation, and thus the form of tax administration is also changing. This paper studies the reasons for the development, internal logic and implementation path of New Quality Productive Forces in the construction of digital taxation governance. Based on the above research, the three main reasons for this are technology, data and industry. The above forces have changed the concept of government from "administration" to "governance", used technology to achieve "intelligentisation" instead of "informatisation", altered the business process from "digitisation" to "digital transformation", and changed the form of governance from "single-subject governance" to "collaborative governance". First, the integration of factor empowerment, process reengineering, precision services, governance collaboration and institutional adaptation should be achieved. Thus, the three dimensions of the implementation path in this paper are technological integration, institutional innovation and organisational talent development. Build a smart tax collection platform, strengthen relevant laws and regulations, cultivate interdisciplinary talents, etc.; all of these aim to improve the modernisation level of tax administration and promote the development of the digital economy.

Keywords: New Quality Productive Forces, Digital Taxation Governance, Driving Mechanisms, Internal Logic, Implementation Paths

1. Introduction

In the current era of the digital economy, new quality productive forces are changing the form of production and governance in both the economy and society. Tax administration is one link in the chain of government work, and many new problems have appeared in the era of digital economy. The problems are the virtualisation of transaction scenarios, the dissolution of business boundaries and the valuation of data elements. The old model of tax administration has some shortcomings in the efficiency of collection and management, accuracy of services, and cooperation. Therefore, in order to understand how the new quality productive forces are promoting the modernisation of digital taxation governance, what their internal logic is, and how they are being implemented, it is necessary to raise the general level of modernisation of tax administration and promote the healthy development of the digital economy.

2. Driving Mechanisms of New Quality Productive Forces and Digital Taxation Governance

2.1 The Main Driving Forces: The Drive of Multiple Factors, such as Technology, Data and Industry

2.1.1 Technology-driven Factors

With the development of new-generation information technology, many types of applications for artificial intelligence, big data, blockchain and cloud computing have gradually started to appear in tax administration. Algorithms in Artificial Intelligence are used to find tax risks and inform people in time. Big data technology can break down the information silos of tax data, integrate and share data among all departments and areas, and help the tax authorities gain an all-round view of the operation of

taxpayers. Blockchain technology has the good qualities of immutability and traceability, so it can be used to keep the records of invoices and taxes unchanged and prevent fraud. Cloud Computing has strong computers, so it is convenient to store and process the tax data there. The above technologies will change the old model of manual tax administration into an automated and intelligent one to improve the efficiency of tax collection and administration^[1].

2.1.2 Data Element-driven Forces

With the development of the digital economy, data has become a key factor of production, and its form in tax administration is changing daily. Data on the operation and transactions of taxpayers' credit serve as the basis for tax administration. On the one hand, the fluidity and value-carrying attributes of data elements have expanded the scope of collection and management from tangible goods and services to intangible data products and services, and the traditional tax rules have found it difficult to cover them. At the same time, there is also a large amount of data for tax administration available. Based on the data collection and analysis results mentioned above, the tax authorities will build all-round profiles of taxpayers to provide personalised tax services and improve tax administration. According to the transaction data of the e-commerce platform, the tax office will know how much money the e-commerce company has earned and collect all the relevant taxes.

2.1.3 Industrial Ecosystem-driven Forces

New types of businesses have emerged in the digital economy, such as the platform economy and the sharing economy, digital finance, etc. Given that the form of these enterprises has the characteristics of cross-border cooperation, virtual operation and asset-light models, the old way of tax collection and administration based on physical business premises and paper vouchers is no longer feasible. A considerable amount of operational data on individual operators in the platform economy is stored by the platform company. If the tax office cannot obtain the data of these platform companies, it will be impossible to know how much tax has been properly paid by these individuals. Most of the transactions in the sharing economy are conducted online, and due to digitalisation and fragmentation, it is difficult to monitor them for tax collection. Given the changes in the industrial ecosystem, tax governance should be based on the new quality productive forces to build a collection and administration system in line with the new economic structure and achieve tax fairness and efficiency.

2.2 The Transmission Path of Driving Forces for New Quality Productive Forces Empowering Digital Taxation Governance

2.2.1 Conceptual Innovation in Governance: From "Administration" to "Governance"

The old mode of tax administration had a tax department at the top and focused on managing taxpayers. With the new quality productive forces, the concept of tax governance is shifting from "administration" to "governance", and now it aims to promote the participation of all parties and the joint creation of public interests. The taxpayer, the third-party institution and the public can all be connected and use the platform for tax administration. The taxpayer can use the tax app to view their tax information in real time, apply for tax deductions, have third-party institutions analyse and use a large amount of tax data, and be aware of any tax evasion by monitoring and reporting on it. The new ideas of the government will promote the opening up of tax administration and the development of all kinds of models simultaneously^[2].

2.2.2 Deepening Technological Application: From "Information-isation" to "Intelligence-isation"

The development of technology in tax administration has gone from informatisation to intelligentisation. At first, the goal of tax informatisation was only to digitise the tax department, so electronic filing and electronic invoicing were the first steps. With the development of new quality productive forces, artificial intelligence and machine learning technology have started to be used to make the tax system self-learning and intelligent. The intelligent Q&A robot can answer all the taxpayers' questions, and the intelligent filing system will automatically generate the filing data according to the operating conditions of the taxpayer and flag any risks. It will improve the efficiency of tax administration and enhance the service experience for taxpayers by making the service more people-oriented and accurate.

2.2.3 Business Process Reengineering: From "Digitalisation" to "Digital Transformation"

Digitalisation is the transformation of business processes into a digital form, and digitalisation is the reconstruction of business processes based on digital technology. With the changes in the new quality

productive forces, the tax business process is no longer undergoing basic digitalisation; now, it is being reformed in conjunction with data and user demands. For instance, in the last tax audit, we had to manually select the audit subjects and conduct on-site inspections of the company's accounts; thus, it was very time-consuming and labour-intensive. Digitalisation and Big Data analysis have been used to find high-risk enterprises in time. The two will work together to collect and save the evidence automatically, reduce the audit period considerably, and improve the accuracy of the audit. The above will help to organise and manage all links in the process reasonably and intelligently improve the tax administration system.

2.2.4 Reorganising the Governance Model: From "single-subject governance" to "collaborative governance"

The new quality productive forces have broken through the barriers of departments and regions, so now the form of governance is changing from single-subject governance to collaborative governance. A data warehouse for tax administration has been built by the tax office, and data sharing among the departments of market regulation, finance and customs has been established. Cloud computing and big data technology have been applied by the tax departments in all parts of the country to build a unified national tax system and prevent tax evasion by enterprises through various tax policies in different areas. Due to the problems of cross-border trade in the digital economy, tax authorities around the world have begun to explore all kinds of forms of international cooperation and tax governance to curb cross-border tax avoidance through data sharing and information exchange. By bringing together resources from all sectors, the form of collaborative governance is quite effective in achieving good governance^[3].

3. Internal Logic of New Quality Productive Forces and Digital Taxation Governance

The main contents of strengthening the governance of digital taxation for the new quality productive forces are the optimisation of factor endowments, reengineering of processes, intelligent services, government-business cooperation and institutional reform. The above reasons work together to show that the two are close.

3.1 The Logic of Factor Empowerment

Strengthen the foundation of technology, data and talent to support the development of digital tax administration in the new era of high-quality development. AI and Big Data Technology are being applied to the administration of tax. The goal of data empowerment is to encourage people to gather, study and apply data in a technologically advanced way to increase the accuracy and intelligence of tax administration. Talent empowerment should train multidisciplinary talents with knowledge of taxation and digital technology to meet the new talent demands of tax administration in the era of high-quality development of new productive forces. The Logic of factor empowerment provides the resources and abilities for the reform of tax administration in the new quality productive forces[4-6].

3.2 The Logic of Process Reengineering

The first way New Quality Productive Forces will support the tax department is to optimise processes. With the help of technology and data, the structure of the tax business process is changing from the old linear-hierarchical model to a flat network model. For example, in the past, to file taxes, people had to go to the tax office and have the staff manually enter the data; now, it is fully online, so taxpayers can submit their tax returns themselves, and the system will automatically verify the information and save it. At the same time, there have been developments in the process of tax audits; now, they are not selected manually but are selected intelligently by a system, and online data auditing and blockchain-based evidence storage have also been introduced. Simplify and optimise the business process to reduce the number of steps in the process and improve the efficiency of tax administration and supervision.

3.3 The Logic of Service Precision

Based on the demands of taxpayers, the aim that the new quality productive forces hope to achieve in tax administration is the logic of service accuracy. Based on the analysis of taxpayer data, the tax office can learn about the various circumstances of all types of taxpayers and provide personalised tax

services. For example, the tax office can provide all kinds of tax incentives for small and micro enterprises, offer international tax policy consultation and risk alert services for cross-border e-commerce companies, etc. According to the logic of service precision, tax administration has developed from "extensive service" to "refined service" to improve the satisfaction and compliance of taxpayers, thus creating a good tax-friendly environment.

3.4 The Logic of Governance Collaboration

A system for the logic of government-business cooperation is being built by the power of new-quality productive forces. With the help of technology and data, tax administration is no longer solely the responsibility of the tax department; now, a network of cooperation with many other departments and regions has been established. The tax office will share data with other departments of the government to jointly supervise and work with taxpayers, third-party institutions and the public in the implementation of tax governance. Collaborative governance can address the problems of closed-offness and deficiency in the old mode of governance, make better use of governance resources, and improve all-round governance performance^[7].

3.5 The Logic of Institutional Adaptation

The logic of institutional adaptation is the guarantee logic for how New Quality Productive Forces will empower tax administration. Given the changes in tax administration due to the new quality standards for the productive forces, relevant institutional rules for regulation and support will also need to be issued. On the one hand, we need to strengthen the laws and regulations on data property rights, data security and privacy protection, etc., to provide an institutional basis for the collection, use and sharing of tax data. At the same time, we need to reform the tax system and build collection-and-administration institutions in line with the new forms of economic development, such as issuing specific tax regulations for the digital economy and data services. According to the logic of institutional adaptation, the introduction of New Quality Productive Forces in tax administration has established a system of rules and legal basis for implementation to promote the healthy development of tax administration reform within the institutional framework.

4. Implementation Paths for New Quality Productive Forces in Digital Taxation Governance

Based on the analysis of the driving forces and internal logic of the above reasons, we need to build implementation paths for new quality productive forces in the three areas of technological integration, institutional innovation and organisational talent to promote the modernisation of tax administration.

4.1 The Road of Technological Integration

4.1.1 Build an All-around and Harmonious Smart Tax System

A smart tax system will be introduced to improve the administration of taxes on the new quality productive forces. Build a single-window platform based on the foundation of the current tax information system to integrate tax collection and administration, taxpayer services, risk prevention and control, decision support, etc. The platform should be able to collect many kinds of data from all over the company, various departments and outside sources, conveniently. Add an AI and Big Data Module to use artificial intelligence and big data technology in the intelligent processing of tax affairs. For example, there is an intelligent tax processing module that can handle all the online operations of tax payment and invoice application for taxpayers. An early warning system will be established to discover any tax risks in the company early and notify the relevant parties. The construction of an intelligent tax system will promote the high-quality development of tax administration work.

4.1.2 Extending the Application Scope of Big Data Technology

Big Data technology has not been fully applied to the administration of taxation yet. On the one hand, we need to increase the scope of data collection by adding online transaction data, social data and logistics data to the collection system, and thus build a complete data profile of taxpayers. At the same time, in order to expand the scope of data analysis, one should conduct mining and analysis of data from all sides, such as tax collection and administration, taxpayer services, policy effects, etc. According to the regional industry data, we can determine which industries are concentrated in that area and issue corresponding industrial tax policies. Based on the analysis of taxpayer credit data, some

tax policies and services will be introduced. Big Data can be combined with other technologies in this way, and blockchain will also be used to improve the whole life cycle of invoice digitalisation based on Big Data.

4.1.3 Build a Safe and Effective Security Support System

Before adding any new technology, we need to ensure the security of data and systems. All parts of the security and support system should cover the security of the network, data and applications. To guarantee the confidentiality and accuracy of the tax data, encryption technology, authentication technology and access control technology should be employed. A Data Backup and Recovery Plan will be set up to enable quick recovery of the system and data in case of a problem. To guarantee the security of the operation and maintenance of the smart taxation platform, regularly carry out security scans to find any vulnerabilities and promptly apply patches to prevent cyberattacks and system failures. Only after the construction of a reliable and efficient security support system will there be good safety guarantees for the use of new quality productive forces in tax administration.

4.2 The Path of Institutional Innovation

4.2.1 Optimisation of Relevant Laws and Regulations on Data Property Rights

To make full use of data in tax administration, we need to clarify the property rights of data. We need to strengthen the issuance of laws and regulations on the definition of data property rights, data transactions and data security. Clarify who should be responsible for owning, using and enjoying the tax data, and unify the sharing of data and transactions among tax authorities and other parties. At the same time, we need to improve the implementation of the Personal Information Protection Law in the field of taxation to ensure that the personal data of taxpayers is properly protected during collection and use, and balance the demands for data utilisation with the right to privacy.

4.2.2 Innovation in Tax Policies and Collection and Administration Systems in Light of New Economic Forms

With the development of new industries and new types of businesses in the digital economy, tax policies and the system for tax collection and administration need to be updated. Tax Policy: We need to study and formulate tax rules for new types of taxes, such as data taxes and digital services taxes, clarify the scope of taxation, tax rates, collection methods, etc. Strengthen the tax-incentive policy system to promote research and development of digital technology and the development of a digital economy. The model for collection and administration should be in line with the characteristics of platforms and the sharing economy, so data-sharing agreements with platform companies can be established to enable individual operators to carry out tax collection. Build a model of "data-driven tax collection and administration" and, with the help of big data analysis, improve the accuracy of collection and administration for new types of enterprises^[9].

4.2.3 Establishment of Institutional Mechanisms for Fault Tolerance, Error Correction and Incentive Compatibility

Institutional innovation should have fault tolerance and offer incentives for people. Fault tolerance and error correction should be added to the tax governance innovation to handle unintentional errors in the exploration of technological application and institutional practice; thus, tax authorities and their staff will be more willing to carry out bold innovations. At the same time, an incentive compatibility mechanism should be introduced to link the results of tax governance innovation in a department with changes in individual careers, and thus more people will be motivated to participate in tax governance innovation. For instance, commendations and awards can be given to teams or individuals who have put forward new ideas for the construction of the smart taxation platform and achieved good results.

4.3 The Path of Organizational Talent

4.3.1 Promoting the Reform of the Tax Organisation Structure to a Networked Model

The old top-down tax system can no longer meet the demands of tax administration in the era of new quality productive forces. Therefore, we need to promote the construction of a network. There should be no hierarchy among the departments, a flat network structure should be established, and the flow of information and speed of decision-making need to be improved. A cross-departmental tax data governance centre will be established to bring together resources from all parts of the tax office, such as collection and administration, auditing and services, etc., unify data management and promote the

collaborative use of data. At the same time, we should build collaborative networks of external institutions, such as universities and research institutions; for example, a tax technology innovation laboratory can be established to jointly develop new technologies for tax administration.

4.3.2 Cultivating Interdisciplinary Talents with Proficiency in Taxation, Data and Technology

Talent is the Foundation for the new quality productive forces of tax administration. A plan for the cultivation of interdisciplinary talents should be developed to nurture professionals with rich knowledge of tax affairs who are also skilled in digital technology, big data, artificial intelligence and blockchain. These can be done in the form of internal training, external recruitment, university-industry cooperation, etc. Regular training sessions in digital technology need to be organised for the tax department, and technology experts should be invited to teach. Work with colleges to offer a particular course in tax digital technology and have some students trained in this area. To strengthen the talent base of the tax office, highly skilled individuals with cross-disciplinary knowledge in taxation and technology should be recruited.

4.3.3 Building an Organisational Culture of Continuous Learning and Innovation

The Spirit of Organisation Drives the Work to Promote Innovation in Tax Administration. Promote the spirit of continuous learning and innovation in the organisation of the tax office. Organise a tax governance innovation forum and a case-sharing meeting to promote a spirit of innovation in the company. Build a knowledge-sharing website for tax staff to post their experiences with technology and new ideas for improving business operations. Actively promote the new achievements and spread them widely to inspire others to innovate. A culture of learning and innovation in the organisation can inspire the innovative spirit of tax staff and offer new ideas for development in the new quality productive forces of tax administration.

5. Conclusion

With the emergence of new quality productive forces, many opportunities and problems have arisen in the digital tax system. At the top of the list are Technology, Data, Industry, and so on. The spread of governance ideas, technology, business models and good governance has all promoted the modernisation of tax administration. The first is that the general ideas of factor empowerment, process reengineering, precision services, governance collaboration and institutional adaptation should be implemented together. To promote the good operation of digital tax governance by new quality productive forces, the three types of implementation paths should be built: technological integration, institutional innovation and organisational talent. Through the construction of a smart tax system, optimisation of the tax system and cultivation of multidisciplinary talents, all-round improvement in the digitalisation, intelligentisation and collaboration of tax governance will be achieved to promote the modernisation of national governance.

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