The Challenges and Countermeasures of Tax collection and Administration in China Under the Background of "Internet + "

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Abstract—**The modernization of tax collection and administration system is an important part of the modernization of national governance capabilities. Yet the "Internet +" provides opportunities for the reform of tax collection and administration system. Nowadays, Chinese tax collection and administration system is facing with both internal and external challenges including slowing economic growth, structural shifts in the economy, the development of e-commerce and internet currency, and internal organizational innovation. In this regard, the reform should be followed: devote to enhancing modern tax management capabilities, design with a dynamic vision, grasp technical dividend carefully, and reform both in system level and technology level. Specifically, the reform should be guided by "pain points", reshape the organizational structure, optimize staffing, improve tax collection and administration legislation and enforcement, use the "blockchain technology" to reshape the core collection and administration processes, and use artificial intelligence at multiple levels to promote the collection and administration capabilities, help the transformation of tax intermediary.**

Keywords—*"Internet +"; Tax Collection and Administration; Blockchain; Artificial Intelligence*

Since the third Plenary session of the 18th CPC Central Committee, the orientation of tax system reform has been raised to a new historical height, and since then China has opened a new round of tax system reform. Tax modernization is the inevitable embodiment of the modernization of the national governance system and governance ability in the field of taxation. The reform of tax collection and administration is the important way to realize the modernization of taxation, and the modernization of collection and management should be used to promote the realization of the modernization of taxation[1]. The reform of tax collection and administration cannot always follow the reform of tax system and lag behind the development of economy[2]. Under the background of the

large change of society and economy, Chinese current tax collection and administration is facing a series of challenges, but no matter what kind of challenges, "Internet" is undoubtedly a sharp weapon to deal with the challenges.

In 2015 government work report, Prime Minister Li Keqiang proposed an innovative entrepreneurial action plan under the "Internet +", and the tax authorities

should become the "paddler" of "Internet + taxation", not the "stewards"[3]. Therefore, exploring "tax collection and administration under the 'Internet +'" is not only the urgent need of the current tax system reform, but also the key link that must be solved in the process of tax modernization. This paper will explore the challenges faced by tax collection and administration from a dynamic perspective, and focus on the possibility of applying new technologies such as artificial intelligence, blockchain, and other emerging technologies to tax collection and administration reform. This paper explores the challenges and countermeasures of tax collection and administration under the "Internet +".

I. THE IMPACT AND CHALLENGE OF HE CURRENT TAX COLLECTION AND ADMINISTRATION IN CHINA

Nowadays, Chinese tax collection and administration system is facing with both internal and external challenges including slowing economic growth, transformation of economic structure, the development of e-commerce and Internet currency, and internal organizational innovation, etc.

A. The "New" of the New Normal of the Eonomy: the Pain of the Slowdown in Economic Growth

Tax collection and administration is rooted in the soil of our country and inevitably constrained by the background of China's economic, social and historical development. In 2014, General Secretary Xi put forward the concept of "New Normal State" of the economy, which not only summarizes the characteristics of Chinese current economy, but also points out

the challenges of economic development. The most important feature of current economic development is that the economic growth rate has changed from high to medium high speed. According to the theory of macroeconomics, the relationship between total tax revenue and GDP is pro-cyclical, and the tax revenue of our country is highly correlated with GDP in the empirical analysis[4]. Therefore, lower economic growth will lead to lower tax revenue growth. This phenomenon is normal, because the tax revenue plays an automatic stabilizer in the macro economy, but the decline in tax revenue growth poses new challenges to tax collection and administration: tax compliance will fall and the cost of tax collection will rise. The penalty for tax evasion is lower than the opportunity cost of bankruptcy, and taxpayers will avoid bankruptcy by means of tax violations[5]. Affected by the global financial crisis, most EU countries' VAT compliance tends to deteriorate. In recent years, China has taken a number of measures to reduce the cost of tax compliance, but with the economic and credit crunch, tax compliance in China, as the western countries, tends to deteriorate[6]. A study for nearly 190000 industrial enterprises in China has found that tax evasion is negatively correlated with the number of loans received by enterprises[7].

B. Economy in Urgent Need of Transformation: the Impact of E-commerce under the "Internet +"

As mentioned earlier, under the "New Normal State" of the economy, the new phenomenon that slowing economic growth has emerged, but the normal has not yet been fully done, that is, a new economic platform has not yet been found to enable the economy to maintain medium high speed growth rate. This is also one of the major challenges of our current economic development. In recent years, as a new business model, e-commerce has lowered the threshold for individuals to provide goods and services directly in the market. The Alibaba retail ecosystem created 36.81 million jobs in 2017, according to 100EC.CN, a research center for e-commerce. More importantly, relying on the continuous innovation of new information technology, it has full potential for development, and will become an important content of supply-side structural reform and sustainable development in the future. E-commerce poses new challenges to traditional tax collection and administration.

First, the "5w1h" of tax elements under e-commerce needs to be redefined. On the one hand, under the e-commerce model, the definition of commodity and the scope of service become broader, and information is trafficked as an important resource. Searching for the "English composition revision" on Taobao, you can see that the top sellers sell about 2,000 a month. On the other hand, the business model has also been greatly innovative. In the "Didi Taxi" model, for example, Didi does not directly provide cars and services, but only provides platforms. In the "Shared Bicycle", bicycle ownership don't change and its right to use is quickly transferred, the platform charges a rental fee and earn interest on the deposit. In this case, e-commerce has produced "5W" questions: what tax should be paid, where to pay, who is the taxpayer, when to pay, what links to pay taxes, what is the basis of tax payment. Some of these problems only put the traditional problems on the skin of e-commerce, which can be directly identified according to their essence, while others need to be standardized according to the principles and spirit of the relevant tax laws. The question of "1h", that is, how to pay and audit under paperless e-commerce, is a big challenge. Because the tax authorities often lag behind in mastering the latest technologies in the market, and the tax information they need is often a commercial secret representing the core competitiveness of e-commerce enterprises, this makes the tax authorities face the double obstacles of technical barriers and information barriers.

Secondly, C2C has a low e-commerce tax compliance. E-commerce enables more people to become suppliers of the market. Small and micro enterprises and individual businesses in China have difficulties in building their own accounts, and they have low degree of tax recognition[8], as well as the concealment of e-commerce transaction, and the tax compliance of C2C has been further reduced.

In addition, e-commerce also brings human resources challenges to tax collection and administration. Under the background of "Internet +", a large number of basic work is replaced by computer, so we need comprehensive management personnel. But if it is just a temporary lag in the renewal of personnel, then the human resources can match the e-business in time. What really brings pressure to tax workers is the constant renewal of e-commerce mode, which is a challenge to the traditional concept of "once and for all after the job" and requires tax workers to have the consciousness and ability of continuous learning.

C. Internet Financial Challenges: Represented by Bitcoin under Blockchain Technology

Internet finance is divided into five main categories: traditional financial Internetization, third-party payment, P2P network loans, crowdfunding of equity and Internet currency[9]. Among them, the first four challenges could be analyzed in a similar way to e-commerce. However, the emergence of Internet currency, represented by Bitcoin, has directly brought about the technological innovation of blockchain under the "Internet +". Bitcoin is generally not recognized as currency, but as a special commodity. However, the emergence of Bitcoin makes cross-border transactions more private and cross-border payment more convenient, mainly because Bitcoin uses the blockchain as its underlying technology.

Bitcoin uses a distributed network, which is decentralized, that is, no specific country or center to manage it. On the same time, Bitcoin transaction information is updated in the "books" of all its owners (regardless of whether a particular owner is associated with the bookkeeping transaction or not) in time. The following two points ensure the security of the

information transmission in blockchain represented by bitcoin: first, the hash function is used to keep the information secret, and the security method is powerful. Hash function encryption can be regarded as "black box operation", that is, we do not need to know its complicated mathematical principle, we only need to know its security is extremely strong, the original information is difficult to tamper with, and the arbitrary owner of bitcoin can verify the source of transaction information. Second, the number of books is infinite. The distributed management of blockchain allows every Bitcoin transaction to be accounted for by all traders. This means that it is almost impossible to tamper with the information since if you want to tamper with a certain transaction information, you have to tamper with all books. In view of this, Bitcoin has gradually become a sharp tool for international transactions: first, it is transparent and secure, does not need to cross-check the identities of all parties as traditional transnational remittances; second, under distributed centers, Bitcoin payment is independence of the administrative jurisdiction and administrative speed; third, relying on the network, Bitcoin could unlimited segmentation to transactions. And in cross-border transactions, even if the sellers do not accept Bitcoin payment, the buyer also can sell his Bitcoin to a third party in the seller's location, and then the third party will pay to the sellers.

It is worth noting that while Bitcoin promotes cross-border trade, it also brings about the following tax collection and administration problems: first, Bitcoin settlement has the characteristic of not being regulated by administrative agencies, that have brought great challenges to monitoring tax sources and tax inspection, resulting in the frequent occurrence of tax evasion and the erosion of tax sources. Second, as a commodity, Bitcoin trading income need to be taxed, just as the income from the sale of stocks. Its specific tax method and the confirmation of tax jurisdiction under cross-border transaction will bring challenges to tax collection and administration. Third, Bitcoin uses digital and anonymous transaction way, and tax authorities find it difficult to find taxpayers unless taxpayers file their own returns, which could trigger underground economies such as money laundering transactions.

D. Intra-organizational Innovation: the Great Incident of the Merger of National and Local Taxes Bureaus

Since the reform of the tax distribution system in 1994, in order to adapt the tax collection and administration system to the reform of the tax system, the tax system has been set up separately. Since then, China has continued to carry out tax system reform, such as the replacement the business tax with a value-added tax, resource tax reform, environmental tax was also introduced in 2018, at the technical level, we launched "the Golden Tax Phase III project ", tax control pos machines and other information equipment. With the development of tax system reform, the modern tax system in China has been basically formed, but the disadvantages of the division of national and local tax authorities have been gradually highlighted, such as the increase of tax cost and administrative cost, the obstacle of sharing information and so on. In order to meet the challenge of internal and external environment, the CPC Central Committee issued the "Plan for deepening the Reform of the Party and State Organization" in March 2018. Item 46 of the plan stipulates: reform the system of collecting and managing between the national and local tax bureaus. Merge the state tax bureaus and local tax bureaus below the provincial level, to undertake the duties of tax revenue and non-tax revenue collection and management within the jurisdiction and so on. After the merger of national and local tax bureaus, we should implement the dual leadership management system with State Administration of Taxation and the provincial governments, but administered mainly by the State Administration of Taxation. The merger of national and local tax bureaus presents new and significant challenges to tax collection and administration, including the following:

The first challenge is how to improve the structural layout and power allocation. The second challenge is how to break the organization inertia under the informationization[10]. Before the merger, all tax bureaus presented the typical pyramid structure, the management levels too many to information transmission is not smooth, the administrative function is fragmented, the supervision is difficult and so on. There is no doubt that the merger of tax bureaus provides an opportunity to address these problems, but further clarity is needed on reform plans and measures. The third challenge is how to grasp the scale of tax authorities at all levels after the merger. The small size of the State Administration of Taxation hinders the design and implementation of the tax system, especially when taxpayers' interprovincial and overseas taxable behaviors is increasing. Internationally, the number of employees of the effective State Administration of Taxation accounts for approximately 3% -10% of the total number of employees, while the proportion of the State Administration of Taxation in our country is only 1% [11]. At present, there are a large number of grass-roots tax stations in China, although this extensive office network facilitates taxpayers, the administrative efficiency is low, and it is not conducive to specialization, and there is collusion risk, management costs are huge. Fourth, how to strengthen the management of tax sources. Before the merger, revenue was divided to collection according to tax categories. The same taxpayer may both belong to the State tax bureaus and the local tax bureaus, but the management of their tax sources are different. In 2008, the State Administration of Taxation established the Department of Tax Administration of large Enterprises, in order to improve taxpayer services and strengthen the management of large group enterprises. but the organization does not have the full management power of large enterprises, such management structure has caused administrative fragmentation. Fifth, how to reduce the cost of transition to achieve smooth transition. There is no doubt that the merger will have a great impact on the relevant subjects (such as taxpayers, tax intermediaries,

college students and job seekers). How to make the reform transition smoothly and reduce the cost of transition as far as possible is a major challenge.

II. THE OVERALL THINKING OF THE REFORM OF "INTERNET + TAX COLLECTION AND ADMINISTRATION"

The reform of tax collection and administration under the "Internet +" should do a good job in top-level design and set up correct guiding ideology, which can be planned from the following aspects.

A. Technical level: Seizing the Technical Dividend Carefully, and Reforming both in System and Technology

Tax collection and management reform in developing countries is easier to learn from the experience of developed countries and enjoy the advantage of late development. But at present, the developed countries only realize the traditional modernization, and all countries are actively exploring the possibility of new technologies used for tax collection and administration. Under this background, the reform of "Internet + tax collection and administration" in China should set up the consciousness of independent innovation and strive for bend overtaking and enjoy the technology dividend. In reality, we should pay close attention to artificial intelligence, blockchain and other emerging technologies, use technologies to force tax collection and administration reform. At the same time, we should be on guard against technological risks. Take blockchain technology as an example, its secrecy function is very strong, but it is not completely impossible to be breached. Looking ahead, how to use emerging technologies, where they should be used in tax collection and administration, and how to establish a risk warning and coping mechanism, these all need careful consideration.

Judging from international experience, promoting the informatization reform of tax collection and administration in developing countries is not just the matter of technology, as far as China is concerned, could the idea of promoting tax collection and administration reform through the "Internet +" be realized much depends on the existing system. In particular, whether the reform of tax collection and administration has the commitment of senior management, the corresponding organizational structure and matching human resources, related to the realization of technical aspects vison. Therefore, the reform of tax collection and administration under the "Internet +" should be pushed forward both in system and technology.

Learning from the experience of other countries in system should be cautious. Chinese land area and population base are far larger than most countries, and there are many levels of government. After the merger of national and local tax authorities, China has the largest tax authority in the world. The level of information facilities, taxpayers' learning ability and tax culture are also different from those of developed countries. If we simply copy developed countries' tax management systems and technical standards, the results are often not satisfactory. For example, the international standard of benchmarking management, that is, to define the optimal effect of various aspects of tax administration, is similar to the normative economics in the study of economics. However, taking the ATO benchmarking system of the Australian Taxation Administration as an example, the Regional Administration of Pensions module is not suitable for our country. In view of this special national condition, China should explore the suitable system and technological reform plan, and open up a new way of socialist "Internet +" tax collection and administration with Chinese characteristics.

B. Management Level: Examining "Internet + Tax collection and administration" in a Dynamic View and Strengthening Risk Management

Using information technology to promote tax collection and administration reform is not an overnight success. From the experience of developing countries, it takes at least three years and some countries take as long as 15 years to complete. In view of this, the reform of "Internet + tax collection and administration" should have a long-term strategic consciousness: first, the reform process needs to maintain continuity, such as unified leadership, unified responsibility and unified guiding ideology[12]. Second, due consideration should be given to the setbacks of the reform. There must be an adequate budget to cover trial and error costs. Finally, establish a self-correcting and updating mechanism to cope with the change of internal and external environment. With the economic downturn, the intensification of international competition, and the increasingly complex economic situation, the tax collection and administration reform has also stepped into the critical period and the deep-water period, the setback of the reform will bring huge economic and social losses. Therefore, we should strengthen the risk management of tax collection and administration reform from the perspective of long-term development.

C. Governance Level: Based on the Improvement of the Ability of Modern Tax Administration, Strengthening the Consciousness of International Competition

Tax collection and administration is not isolated, it is subject to our governance capacity and governance system. The reform of "Internet + tax collection and administration" is not only an internal matter of tax bureau, but also needs to cooperate with the overall reform of our administrative organization. For example, information-sharing systems need to be jointly built by tax, banking, social security, finance and other departments. Therefore, we should set out the corresponding reform plan from the perspective of governance of the "whole government". In addition, in view of the macro-control function of tax revenue, tax collection and administration should serve the national strategy at a time of rapid development of "The Belt and Road" and intensified trade competition between China and the United States. How to collect and manage emerging business models such as cross-border e-commerce and Internet finance that can

promote innovation and improve Chinese international competitiveness, these are all need to be considered. In particular, the reform of tax collection and administration should have an international perspective and establish the consciousness of "opening to the outside world". Specifically, we should pay attention to the international dynamics and risks of tax collection and administration, strengthen international tax cooperation, and establish an International Tax Cooperation Platform (PCT). The reform of system and technology should strive to be in line with international standards.

III.   EXPLORING THE TAX REFORM PATH UNDER "INTERNET +"

A. *Institutional Level: Guided by "Pain Points", Reshaping the Organizational Structure, Optimizing Staffing, and Improving Legislation and Law Enforcement*

Firstly, we should focus on the "pain spot" and pay attention to the specific challenges faced by tax collection and administration. From a dynamic perspective, tax collection and administration is faced with a series of internal and external shocks and challenges, including economic slowdown, economic restructuring, the development of electronic commerce and internet currency, and organizational innovation. This requires us to pay attention to specific industries, some taxpayers and specific issues. As far as specific industries are concerned, the demand for iron and steel and coal mines has been reduced, and we are faced with the problem of oversupply, low concentration of industries, monopoly of international giants and low profitability of the whole industry[13]. In view of this, the following three aspects should be considered: ensuring tax revenue, at least not impeding or even encouraging its development; and serving the national trade strategy. For taxpayers, in the context of the transformation of economic structure and economic globalization, we should focus on individual businesses and key tax sources of the third industry. In terms of specific issues, financial tax links, tax issues of cross-border electricity supplier and bitcoin transactions are the important issues which need to be focused on.

Secondly, we should take "Internet +" as an opportunity to reshape the organizational structure of the tax authorities. After the merger of the state and local tax authorities at and below the provincial level, the State Administration of Taxation faces greater internal challenges. As far as reality is concerned, first of all, we need to further break the organizational inertia and establish a flat organizational structure.In the past, the uploading and releasing mode of Pyramid level, there was a large number of "middle layers" responsible for transmitting information. In the "Internet +", transfer, information collection work has been replaced, the middle layer should be devoted to tax source monitoring, risk management. And the establishment of a flat organizational structure, that is, the working group composed of the staff from different

departments is conducive to the middle level to improve the decision-making power to consider the tax related affairs and play subjective initiative. Secondly, the State Administration of taxation should expand the headquarters scale, or choose to set up a "excellent center" in some urban areas to directly implement the headquarters plan 错误!未定义书签。With the expansion of the headquarters, it is necessary to consolidate the tax stations at the grass-roots level. The State Administration of taxation can merge tax stations, centrally set up telephone call centers, and provide electronic services. Furthermore, it is necessary to further strengthen the management of tax sources. After the merger of state and local tax authorities, it is necessary to unify the standard of tax source management and draw lessons from international experience to pay more attention to the key tax source enterprises and high wealth individuals, and to provide more individualized management. For example, we should set up taxpayers' groups for large, medium and small enterprises and high wealth individuals, and assign special persons to be responsible to the taxpayers' group so as to eliminate the dispersion of the current administrative responsibilities. Finally, it is worth noting that organizational reform should focus on social interests, consider social impact, and strive for a smooth transition.

Thirdly, we should solve the problem of human resource matching and loss under the "Internet +". "Internet + tax collection" reform should not lag behind the reform of the tax system, therefore, professional skills and the service concept of tax personnel can't lag behind the tax law reform, it is urgent for tax personnel to carry out relevant training in tax law reform. At the same time, as mentioned before, under the "Internet +", a lot of work being replaced by computers, Staff in the middle level need to transition. As of May 2016, the total number of tax officials in the state and local tax system was close to 800 thousand, accounting for 1/10 of the total civil service[14]. After the merger of state and local tax authorities, it is necessary to "keep fit" and "lose weight" for tax officials. In particular, the emergence of financial products and services requires the tax personnel to take both financial and tax knowledge into consideration; a large number of e-commerce transactions require tax personnel to understand certain Internet knowledge; and cross-border profit transfer, evasion of taxes and other issues require tax personnel to have international legal literacy. Although the use of information technology has reduced the demand for tax personnel at the grass-roots level, it needs more complex and managerial talents who can cope with the challenges from inside and outside. In addition, it is worth noting that the income standard of tax professionals under the market economy must be in line with the market level so as to reduce the manpower cost caused by brain drain.

Moreover, we should improve the relevant laws of tax collection and administration, and strengthen the unity of law enforcement. Under the "Internet +" background, we can be

improved from the following aspects: first, we should speed up legislation on emerging tax issues such as Internet Finance and e-commerce, and the application of new technologies in the field of tax collection and administration also needs legislative norms. Second, we should properly balance the power of the tax authorities and the rights of the taxpayers, in order to establish a good environment for investment, to provide more support and protection for the enterprises, and to reduce the cost of tax compliance. Third, we should strengthen the protection of tax related information, provide a comprehensive and procedural protection scheme for the privacy of the taxpayers, and standardize the sharing of tax information between the tax bureau and other government agencies, the tax bureau and the intermediary agencies. In addition, when formulating the tax law, we should consider the enforcement issues as far as possible and ensure the unity of law enforcement.

B. Technical Aspects: the use of blockchain technology to reshape the core collection process

Blockchain technology originates from bitcoin, but its principle can be applied not only to bitcoin, but also to information management. The specific assumptions of applying blockchain technology to tax collection and administration are as follows:

First, in terms of personal income tax. At present, the collection of individual income tax depends on the multiparty interconnection, and the process of enterprise withholding individual income tax is as follows: firstly, calculate employee salary, social security, housing accumulation fund and individual income tax in the given month; secondly, allocate the wages, social security and housing accumulation fund through the bank; since then, the enterprises submit the salary calculation form to the tax authorities and declare the withholding and payment amount, and paid through online banking. In the above process, the tax authorities, banks, social security and other departments are different "information centers", each has its own special information, and the information communication between the various departments needs to be copied from each other. In addition, taxpayers have to declare their income voluntarily when there are many sources of income, or some of them are short of withholding agents. Under the blockchain technology, the tax authorities, banks, social security, housing accumulation fund management departments and the vast taxpayers are the different nodes, and they are linked together by "the chain", any tax related information will be updated in all the nodes. Therefore, it saves the necessity of information copying and eliminates the possibility of information copying errors, and improves the accuracy and timeliness of tax related information. Blockchain technology can also reduce taxpayers' financial and tax workload and reduce tax compliance costs. In addition, due to the use of blockchain technology, the payment rate of banks will also increase significantly.

Second, in terms of VAT. As far as the reality is concerned, there is a problem of inconsistency between the time of tax obligation and the time of tax payment[15]. There are two reasons: first, the VAT can not be declared and paid in real time under the existing conditions. Therefore, the taxpayers usually declare and pay the VAT on a monthly or quarterly basis. Second, after the enterprise generates the input tax, it needs to check the invoices that need to deduct the current input tax on the tax authorities website. The certification time of the invoice is 180 days, which further aggravates the disagreement between the time of paying tax obligation and the time of tax declaration, which leads to the fact that the actual transaction is difficult to be checked in real time when filing tax returns. In addition, after the certification of the enterprise invoice, the tax authorities also need to cross check and correct the invoice information of the invoicing party and the certifying party, which requires a lot of human cost. Under the blockchain technology, all the information of the transaction can be recorded in real time, and real-time information declaration and real-time comparison are realized.

Third, in terms of transfer pricing. The blockchain has the function of "intelligent contract", that is, the contents of the contract can be entered, and it will automatically execute the transaction once the conditions of the contract are reached. For example, we use artificial intelligence to monitor inventory, information can be updated to the blockchain in real time, when the inventory is less than a certain index, it will automatically purchase among the affiliated enterprises, and declare and pay tax. This makes the transfer pricing easier to trace: the transaction contract of the affiliated enterprises must be enter the blockchain, so it is difficult for the enterprise to tamper with the transaction information. The "intelligent contract" can also punish the illegal acts such as tax evasion by new means. The taxpayers attempting to tamper with the information are likely to be found in the blockchain. The blockchain can impose sanctions on these taxpayers by non-monetary means, for example, punishing enterprises to withdraw from the tax collection and administration blockchain for a certain time. Because all transaction information should be entered into the blockchain, and the blockchain also helps to reduce the transaction risk among enterprises, the business of the enterprises that withdraw from the tax collection and administration blockchain will be affected.

C. Technical Level: Using Artificial Intelligence to Promote Tax collection and administration at Various Levels, and Help Tax Intermediary Transformation

Above all, we can use artificial intelligence to promote tax collection at various levels. Artificial intelligence is the development direction of information technology. Artificial intelligence can further promote the application of four levels of the Golden Tax Phase III (taxation level, management level < financial management, human resources and internal audit >,

analysis support and external information), especially at the higher level, as follows:

The first level is to provide basic self-help services for taxpayers. At this stage, AI is used in some daily work. The tax robot can identify the rights of the taxpayers by speech recognition, and the taxpayers can consult the daily tax issues by voice and send out the instructions of tax declaration, tax payment, administrative reconsideration and so on. The demand for text entry is reduced or even cancelled, and intelligent taxation can completely realized user friendly. Intelligent tax can also identify the text, check and other tax related information, and automatically check the correctness of text spelling, declaration logic and so on, reduce human errors and improve the quality of tax returns.

The second level is to identify and classify tax related information automatically. Intelligent taxation automatically identifies information under the support of a large number of intelligent devices. For example, the camera system supports intelligent tax to identify fixed assets and submit data in real time. In terms of information classification, intelligent taxation can classify taxable information according to different standards. This process can be analogous to the automatic classification of spam by artificial intelligence, although the results are not completely accurate, but as errors are constantly discovered, information users will mark the errors, artificial intelligence will automatically modify the system to prevent similar mistakes from happening again, so intelligent classification will become more and more accurate. In addition, intelligent taxation can handle different formats of information, unify format standard to facilitate data and information inquiries and statistics.

The third level, intelligent tax has simple judgment and decision-making power. If taxpayers apply for tax relief, tax extension, and administrative reconsideration, intelligent taxation can judge whether it is accepted and supported or not according to the existing tax information and taxpayer's reputation. Similar to the construction of wisdom banks, the "smart teller machine" launched by China Construction Bank. "smart teller machine" covers about 50% of the counter trade volume, in addition to dealing with the traditional accounts and electronic banking business, the smart teller machine also has a certain loan rights. When the customer swims the ID card on the teller machine, the intelligent bank can judge the customer's credit in real time and provide some small loans for the customers.

The fourth level, the senior intelligent tax. Intelligent tax can analyze all the internal and external information, such as national income, audit times, jurisdiction, legal and political attention, and judge the traditional tax legal issues and fraud strategies that need human judgment, so as to simulate tax risk in real time, identify tax evasion strategies of taxpayers, and help the government to monitor tax sources.

Finally, we should boost the tax intermediary transformation in "Internet +" background. Under the existing tax collection and administration, taxpayers need to declare tax related information on their own. For some small businesses or self-reporting uneconomical enterprises, they often outsource tax business to the third party intermediaries. The third party tax intermediaries also provide tax consultation and planning business for special tax issues such as enterprise restructuring. Under the technology of artificial intelligence and blockchain, the process of enterprise self-declaration will be simplified or even disappeared. The integrated system of blockchain and artificial intelligence can automatically collect tax information, automatically calculate and withhold taxes. With the unification of the time of tax declaration and the time of tax obligation, the traditional tax planning will also lose its space. Although artificial intelligence and blockchain technology are "creative destruction" to tax intermediaries, tax intermediaries still have room for development. As the tax agency is more aware of the needs of tax authorities and taxpayers, it can actively participate in the development of blockchain in tax collection and administration. After the blockchain is incorporated into the tax collection and administration, new tax problems will be produced. The tax intermediary still has a place in providing tax consultation and other services.

REFERENCES

[1] Wang X Z, Finance S O. Modernization Construction of Tax Collection: A Way towards Promoting Tax Capacity[J]. Journal of Renmin University of China, 2015. (in Chinese)

[2] Wang X R. The restrictive Factors of Establishing a Modernized Tax Collection and Management System[J]. Tax Research, 2015(02):80-84. (in Chinese)

[3] Zang Y M. Taking the Modernization of Collection and Management as the engine to promote the Modernization of Taxation[J]. Tax Research, 2014(08):52-55. (in Chinese)

[4] Xiang J. An Empirical Analysis of the Relationship between Tax Revenue and GDP in China[J]. Statistics and Decision-making, 2007(17):100. (in Chinese)

[5] Brondolo J D, Zhang Z. Tax Administration Reform in China: Achievements, Challenges, and Reform Priorities[J]. Imf Working Papers, 2016, 16(68):1.

[6] OECD, OECD/G20 Base Erosion and Profit Shifting Project: Final Report.2015.

[7] Cai H, Liu Q. Competition and Corporate Tax Avoidance: Evidence from Chinese Industrial Firms[J]. Economic Journal, 2009, 119(537):764–795.

[8] Wang J. Study on the Problems about Tax Collection and Management of Individual Businesses in China[D]. Xiamen University, 2014. (in Chinese)

[9] Liu L, Zhong S. A Tax Research on Internet Finance[J]. International Taxation in China, 2015. (in Chinese)

[10] Zhu M Q. A Study of Organizational Inertia in the Process of Informationalization[J]. Accounting newsletter, 2015(27):125-128. (in Chinese)

[11] International Monetary Fund. Current Challenges in Revenue Mobilization Improving Tax Compliance, 2015.

[12] Miller R, Jantscher C D, Milka. Improving Tax Administration in Developing Countries[J]. 1992.

[13] Li K H, Ling R H. Strategic Choice of large State-owned Iron and Steel Enterprises under the New normal [J]. Chinese investment, 2015(11):68-69+11. (in Chinese)

[14] Commissioner Wang Jun Talks about the Reform of the Collection and Management System of the National Taxation Bureau and the Local Taxation Bureau [J]. International taxation, 2016(05):32-33. (in Chinese)

[15] Cas Milner. Bjarne Berg .Tax Analytics Artificial Intelligence and Machine Learning–Level 5 .2017